A Case Study of the
College of Applied Science and Technology (CAST) Building at Rochester Institute of Technology

Photo Coutesy RIT Facilities Management Services

Contents

General Information

Identifying Information

Short Project Name: RIT CAST Building

Full project name:
The College of Applied Science and Technology Building at Rochester Institute of Technology

Project owner: Rochester Institute of Technology

Owner type: For Profit

Project size: 42,956 SF

Default units of measurement: English

Floors above Ground Plane: 3

Construction Classification Code: IIB

Occupancy Classification Code: Group B

Project Building Code: New York State Building Code

Full-time Equivalent Occupants: 232 (Please see “Program” (p.6) and also “Appendix A” for RIT CAST Building Full-Time Equivalent (FTE) calculations.)

Site Context/Setting:

Project location

Address: 120 Lomb Memorial Drive
Rochester, NY 14623

Latitude Degrees Minutes [north/south]: 43° 5' 26.0808"
Longitude Degrees Minutes [east/west]: -77° 40' 30.7452"
Elevation: 528’ ASL +/-
Site context/setting: Suburban, Campus

Occupancy

Primary occupant type: For Profit
Owner occupied: Yes
Typical number of permanent occupants: 41 people
Average hours per permanent occupant: 8 hours per week

Typical number of visitors per week people: 191 people (includes student occupancy)
Average hours per visitor hours per week: 6 hours per week

Details about occupancy:
This building is predominantly a mix of lab and office space that also provides conference rooms, public assembly spaces and required support areas.

Scope

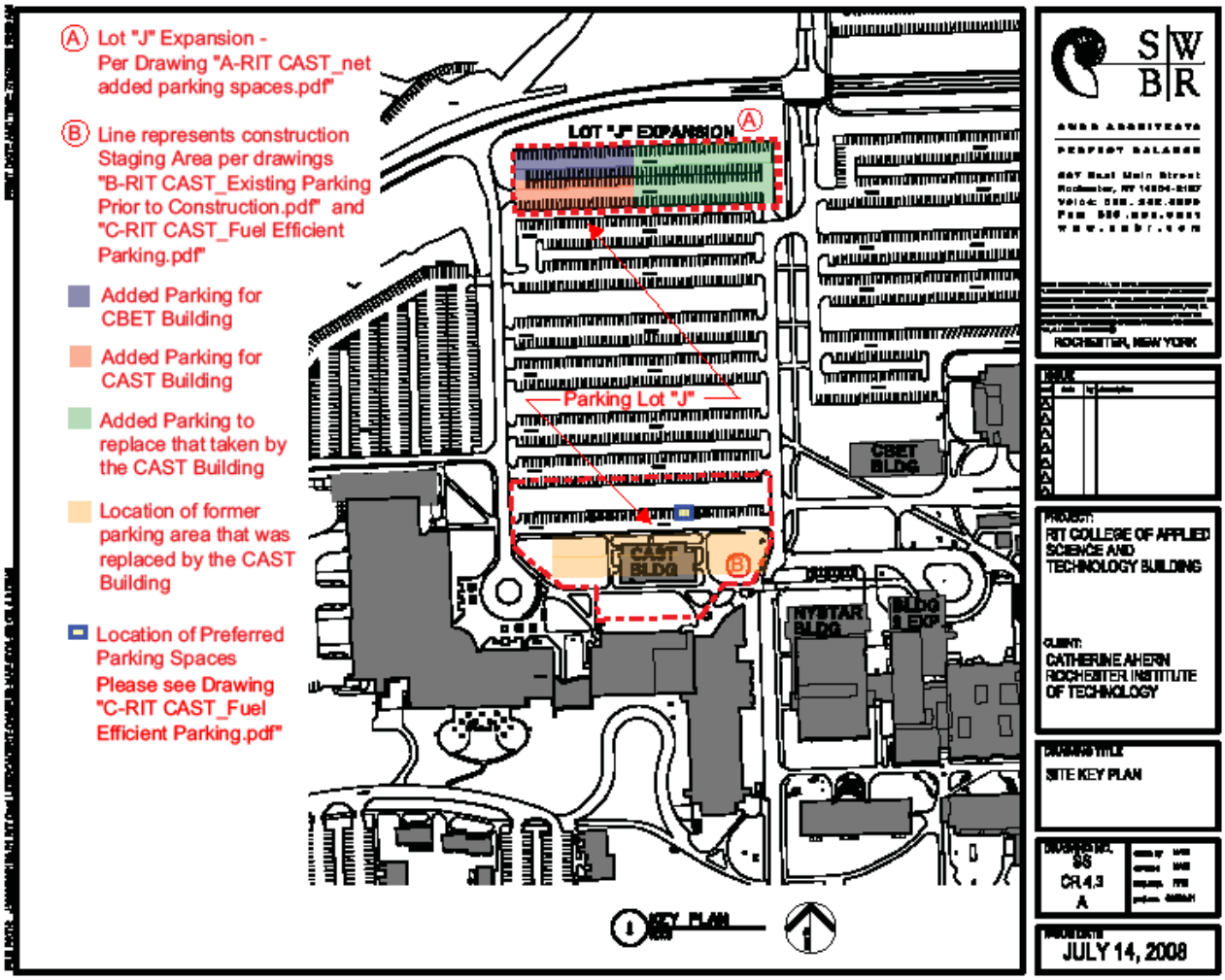
Number of buildings*

Single Building: Yes
Size of building: 42,956 SF
Building Footprint: 12,213 SF

History and completion date

Percent New: 100%
Percent renovation: 0%
Historic?: No
Year of construction: 2007-2008
Year of last major renovation: N/A
Date of completion /occupancy: April 2008

Completion date notes: None



Building Types

Building types

[ ] Commercial office
[ ] Industrial (manufacturing, warehouse, recycling center, public works)
[X] Laboratory
[ ] Restaurant
[ ] Retail (store, supermarket, art gallery)
[ ] Financial & communications (bank, post office, data center)
[ ] Single-family residential
[ ] Multi-unit residential (apartments, townhouses, dormitories, barracks)
[ ] Special needs housing (assisted living, long-term care)
[ ] Hotel/resort
[ ] Daycare
[ ] K-12 education
[X] Higher education
[ ] Recreation
[ ] Library
[ ] Health care
[ ] Animal care (veterinary, kennel)
[ ] Interpretive Center (museum, nature center, aquarium, zoo)
[X] Assembly (conference center, community center, convention center, place of worship, performing arts, movie theater)
[ ] Stadia & arenas
[ ] Public order & safety (police station, fire station, correctional facility, courthouse)
[ ] Transportation (airport, train station, bus station)
[ ] Park (greenway, recreation space, wildlife)
[X] Campus (corporate campus, school)
[ ] Community (neighborhood, residential development)
[ ] Military base
[ ] Regional plan
[X] Other: Academic Office

Program Spaces

Select all the apply, and list approximate % of total project.

Indoor spaces

Animal care	-	Living quarters	-
Cafeteria	-	Lobby/reception	3 %
Child care	-	Manufacturing	-
Circulation	17 %	Mechanical systems	13 %
Classroom	4 %	Medical treatment	-
Conference	4 %	Office	12 %
Data processing	-	Public assembly	4 %
Detention	-	Restrooms	3 %
Dining	-	Retail food	-
Elder care	-	Retail general	-
Electrical systems	2 %	Structured parking	-
Greenhouse	-	Warehouse	-
Gymnasium	-	Maintenance	-
Laboratory	34 %	Storage	-
Lab/Classrm Support	2 %		

Outdoor spaces

Athletic field	-	Pedestrian/non-motorized vehicle path	8 %
Drives/roadway	-	Playground	-
Garden—decorative	-	Wildlife habitat	63 %
Garden—productive	-	Patio/hardscape	-
Golf course	-	Shade structures/outdoor rooms	-
Interpretive landscape	-	Restored landscape	-
Parking	29 %	Other	-

Descriptions

Enter a short description of this project (fewer than 100 words).

RIT's College of Applied Science and Technology (CAST) Building was officially opened in April 2008. This latest addition to the RIT campus is also its "greenest" building. The CAST Building marks the first facility designed and built according to the Leadership in Energy and Environmental Design (LEED) Rating System standards on the RIT Campus.

RIT's commitment was appropriate to this project as CAST is one of the most unique and innovative colleges in the world. At the heart of every CAST program is a commitment to preparing students to be innovative, technologically advanced, and entrepreneurial. The new CAST Building complements those ideals.

Enter a description of the significant environmental aspects of this project.

The design of the CAST building implemented a wide range of sustainable strategies. These included careful management of the site in development, the preferred use of renewable or recyclable materials rather than virgin materials, improved design for energy & water efficiency, design and construction measures to improve indoor air quality, and a category which RIT and CAST wholly embraced, "Innovation in Design".

Several RIT colleges are actively involved in real-life educational exercises that support the project with photographic documentation of construction and recording of environmental protective measures and others are preparing materials for an educational display. The CAST building is also a component of the college's curriculum. The building itself will be used as a teaching tool for sustainable design practices.

The building was sited on a former parking lot in order to have it located more closely to the other facilities and utilities. It was also site linearly East to West to maximize daylighting opportunities.

Green Cleaning contracts, policies, products and training have all been implemented campus-wide and the CAST project will initiate RIT's formal documentation of its Green Cleaning policies.

RIT has invested in energy- and water-saving design strategies, including a rainwater reuse system and lighting & HVAC controls that monitor building occupancy and reduce power demands accordingly. The improved systems within the CAST Building will provide an approximate 21.4% savings in electrical energy.

Two 1500-gallon cisterns were installed in the lower level of CAST to collect rainwater from the roof. This water will be used for purposes such as flushing toilets in the restrooms. Combined with additional efficiency improvements, this creates a water savings of over 35,000 gallons per year, or a saving of approximately 75% of the buildings' typical annual water use.

Rainwater is also used to irrigate a unique design element inside the main entrance– a vertically landscaped wall that enhances the lobby space and improves air quality. The "green wall" will be designed as a companion to an educational display in the CAST lobby that will serve to inform visitors and occupants of the building's design, the LEED Rating System and RIT's Commitment to Sustainability. From a more global view, CAST's reduced demand for energy in this building amounted to a reduction in its carbon footprint of approximately 41%.

RIT knows that the CAST building will return their initial investments in sustainability many times over the years to come through its energy and water savings. With all investments in sustainable design strategies considered, calculated in today's dollars, RIT should recoup this investment within five years and continue to save a potential $.5M over the course of the next twenty years.

Keywords

Process

[ ] Integrated team
[ ] Training
[ ] Simulation
[ ] Contracting
[X] Performance measurement and verification
[ ] Design charrette
[ ] Green framework
[X] Green specifications
[X] Commissioning
[X] Operations and maintenance

Community

[ ] Transportation benefits
[X] Open space preservation
[ ] Brownfield redevelopment

Site & Water

[X] Wildlife habitat
[X] Indigenous vegetation
[X] Water harvesting
[ ] Efficient irrigation
[ ] Graywater
[ ] Wetlands
[X] Stormwater management
[X] Efficient fixtures and appliances
[X] Drought-tolerant landscaping
[ ] Wastewater treatment

Energy

[X] Massing and orientation
[X] Glazing
[ ] Passive solar
[X] Lighting control and daylight harvesting
[ ] On-site renewable electricity
[ ] Insulation levels
[X] Airtightness
[X] HVAC
[X] Efficient lighting
[ ] Cogeneration

Materials

[ ] Adaptable design
[ ] Benign materials
[X] Recycled materials
[ ] Certified wood
[X] Occupant recycling
[ ] Durability
[ ] Salvaged materials
[X] Local materials
[X] C&D waste management

Indoor Environment

[ ] Connection to outdoors
[ ] Natural ventilation
[ ] Moisture control
[ ] Noise control
[X] Indoor air quality monitoring
[X] Daylighting
[X] Ventilation effectiveness
[X] Thermal comfort
[X] Low-emitting materials

Process

Process descriptions by phase*

Provide as much detail as you can on any aspects of the process--positive or negative--related to the environmental performance of this project. At a minimum, describe process issues relating to energy efficiency and the use of renewable energy.

Predesign
The building was oriented linearly in an East-to-West orientation to maximize daylighting opportunities. The building's plan was configured simply as a double-loaded corridor that simplifies circulation and separates offices functions from higher-end lab functions. Climate-sensitive spaces were located to the north.

Design
Designed in accordance with the USGBC LEED-NC Rating System (Version 2.2) criteria, this project sought to minimize energy requirements. Regular communication on LEED issues was critical to the success of the project. LEED education for the entire team, including the end-users, was important early in the design phase. The pace of construction made it critical to our team to make all major material and building envelope decisions as early as possible.

Construction
Construction was fast paced, presenting some challenges in the review of LEED products. The whole team's experience in sustainable projects will be valuable moving forward. Thorough LEED submittals are a must. Project Kick-off meetings on LEED were beneficial.

Operations/Maintenance:
CAST Building was completed with several high efficiency measures featuring:

- Building Automation System (BAS) to assist with energy monitoring and corrective responses to environmental problems.
- Space temperatures are controlled to maintain required internal conditions.
- Space Occupancy Motion sensors installed to decrease energy usage after operating hours
- Implemented economizing control to utilize 'free' energy of outside air to satisfy required internal space conditions.
- Improved design to increase efficiency and thermal property of glazing and windows.
- Improved thermal properties of the building envelope
- Improved roof insulation.
- Provided variable flow of air and water in building systems.
- Temperatures in heating loops are adjusted in response to changes in weather condition.
- Building included scheduled by New York State Research and Development Authority (NYSERDA) energy efficiency measures.
- Building have been commissioned to assure top operational efficiency.

Process descriptions by phase*

Commissioning:
CAST Building commissioning was part of the LEED submission. Two attempted credits: *Energy and Atmosphere Prerequisite 1: Fundamental Commissioning of the Building Energy Systems* and *Energy and Atmosphere Credit 3: Enhanced Commissioning* were completed, submitted and approved by USGBC.

Commissioning followed the LEED-prescribed routine including:

- Designating Commissioning Authority.
- Review of Owner's Project Requirement (OPR) and Basis of Design (BOD).
- Commissioning documentation was created and OPR and BOD requirements were incorporated in construction documents.
- Commissioning plan was developed and implemented.
- Equipment instillation was verified and its performance checked by the pre-functional test, and finally commissioned.
- A summary report of commissioning was completed.
- Commissioning design review was completed prior to mid construction.
- Contractor submittals were reviewed.
- System manual was created to help with understanding and operation of commissioned system.
- Requirements and completion of operators and building occupant's training were confirmed.
- Building is pending a 10 month review of its operation and customer satisfaction.

Measurement & Verification:
A custom method for measurement of customer satisfaction was developed. All areas were thoroughly reviewed for local comfort and customer satisfaction. The building is pending its 10 month review.

Post-occupancy evaluation:

RIT as the 'Owner' of the new building agrees to implement a thermal comfort survey of building occupants within a period of six to eighteen months after building's approval to occupancy.

A survey of building occupants will collect anonymous responses, grading the thermal comfort of the building . Occupants can express their level of satisfaction with thermal performance, describe the thermal comfort related problems and provide comments pertinent to building comfort.

Team members and the facilities will then be able to define problematic areas and relate problems to building system performance. RIT has agreed to develop a plan for corrective action if more that 20% of occupants are dissatisfied with thermal comfort of the building. This plan would include measurements of relevant environmental variables in problem areas in accordance with ASHRAE Standard 55-2005.

Information and software tools:
The building control system was designed using Automated Logic Control System software.

Other information resources and software tools that were most helpful in the creation of this project include: LEED-Online, AutoCAD, Trane software, DOE-2.2, AutoDesk 3D Viz, Adobe Acrobat

Project Team

Project Management
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Architect, LEED Consultant:

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Commissioning Agent:
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Facility Manager:
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Energy Consultant:

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Syracuse, NY 13212
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Interior Designer:

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Structural Engineer:
Jensen Engineering, P.C
Structural Engineering Consultants
1653 East Main Street
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tel: 585.482.8130
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NYSERDA Outreach Project Consultant:
Sustainable Performance Consulting, Inc.
807 Ridge Road
Suite 206
Webster, NY 14580
tel.: 585.671.8110
fax: 585.671.8121

Contractor:
Welliver-McGuire, Inc.
250 North Genesee Street
Montour Falls, NY 14865

Finances

Description of finances

Describe how the project was financed, and provide details on innovative or nonstandard financing approaches that were instrumental for this project.

Financing mechanisms

Check all that apply.

Credit enhandment

[X] Loan guarantees-public (NYS)
[X] Loan guarantees-private (RIT)

Equity

[ ] Cash
[ ] Historic tax credits
[ ] Green building tax credits
[ ] Government appropriation
[ ] Affordable housing tax credits
[X] Other tax credits (NYSERDA)

Grant

[ ] Public agency
[X] Private (McGowan Foundation)

Loans

[ ] Public institution
[ ] Bond
[ ] Private (bank, insurance)

Procurement process

[X] Design-bid-build (CM)
[ ] Performance based contracts
[ ] Design-build

Costs

Project Cost

Project cost not including site work, furniture, fit-out and equipment (FFE):	$8,591,000
Estimated Design Fees:	$880,000
Estimated furniture, fit-out and equipment (FFE) budget:	$200,000
Estimated site work budget, including surface parking:	$1,100,000

Cost and payback description

Estimated first cost/savings with green/sustainable technologies, strategies and design:	$157,478
Estimated 20-year life cycle savings through green/sustainable technologies, strategies & design:	$505,060
Estimated cost to prepare documentation for LEED Certification:	$59,500
LEED fees as a percentage of construction cost including site work, furniture, FFE:	.55%

LEED-NC Rating System Goals

Project Checklist

LEED Project Goals were set and tracked as follows:

LEED for New Construction v2.2
Registered Project Checklist

Project Name:
Project Address:

Yes	?	No			
9	1	4	**Sustainable Sites**		14 Points
Y			Prereq 1	**Construction Activity Pollution Prevention**	Required
1			Credit 1	**Site Selection**	1
1			Credit 2	**Development Density & Community Connectivity**	1
		1	Credit 3	**Brownfield Redevelopment**	1
	1		Credit 4.1	**Alternative Transportation**, Public Transportation Access	1
1			Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
1			Credit 4.3	**Alternative Transportation**, Low-Emitting & Fuel-Efficient Vehicles	1
		1	Credit 4.4	**Alternative Transportation**, Parking Capacity	1
		1	Credit 5.1	**Site Development,** Protect of Restore Habitat	1
1			Credit 5.2	**Site Development,** Maximize Open Space	1
1			Credit 6.1	**Stormwater Design,** Quantity Control	1
1			Credit 6.2	**Stormwater Design,** Quality Control	1
1			Credit 7.1	**Heat Island Effect,** Non-Roof	1
1			Credit 7.2	**Heat Island Effect,** Roof	1
		1	Credit 8	**Light Pollution Reduction**	1

Yes	?	No			
5			**Water Efficiency**		5 Points
1			Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
1			Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
1			Credit 2	**Innovative Wastewater Technologies**	1
1			Credit 3.1	**Water Use Reduction**, 20% Reduction	1
1			Credit 3.2	**Water Use Reduction**, 30% Reduction	1

6		11	**Energy & Atmosphere**		17 Points
Y			Prereq 1	**Fundamental Commissioning of the Building Energy Systems**	Required
Y			Prereq 2	**Minimum Energy Performance**	Required
Y			Prereq 3	**Fundamental Refrigerant Management**	Required
4		6	Credit 1	**Optimize Energy Performance**	1 to 10
				10.5% New Buildings or 3.5% Existing Building Renovations	1
				14% New Buildings or 7% Existing Building Renovations	2
				17.5% New Buildings or 10.5% Existing Building Renovations	3
				4 21% New Buildings or 14% Existing Building Renovations	4
				24.5% New Buildings or 17.5% Existing Building Renovations	5
				28% New Buildings or 21% Existing Building Renovations	6
				31.5% New Buildings or 24.5% Existing Building Renovations	7
				35% New Buildings or 28% Existing Building Renovations	8
				38.5% New Buildings or 31.5% Existing Building Renovations	9
				42% New Buildings or 35% Existing Building Renovations	10
		3	Credit 2	**On-Site Renewable Energy**	1 to 3
				2.5% Renewable Energy	1
				7.5% Renewable Energy	2
				12.5% Renewable Energy	3
1			Credit 3	**Enhanced Commissioning**	1
1			Credit 4	**Enhanced Refrigerant Management**	1
		1	Credit 5	**Measurement & Verification**	1
		1	Credit 6	**Green Power**	1

continued…

Project Checklist (continued)

Yes	?	No			
5	1	7	**Materials & Resources**		13 Points
Y			Prereq 1	**Storage & Collection of Recyclables**	Required
		1	Credit 1.1	**Building Reuse**, Maintain 75% of Existing Walls, Floors & Roof	1
		1	Credit 1.2	**Building Reuse**, Maintain 100% of Existing Walls, Floors & Roof	1
		1	Credit 1.3	**Building Reuse**, Maintain 50% of Interior Non-Structural Elements	1
1			Credit 2.1	**Construction Waste Management**, Divert 50% from Disposal	1
		1	Credit 2.2	**Construction Waste Management**, Divert 75% from Disposal	1
		1	Credit 3.1	**Materials Reuse**, 5%	1
		1	Credit 3.2	**Materials Reuse**,10%	1
1			Credit 4.1	**Recycled Content**, 10% (post-consumer + ½ pre-consumer)	1
1			Credit 4.2	**Recycled Content**, 20% (post-consumer + ½ pre-consumer)	1
1			Credit 5.1	**Regional Materials**, 10% Extracted, Processed & Manufactured Regio	1
1			Credit 5.2	**Regional Materials**, 20% Extracted, Processed & Manufactured Regio	1
		1	Credit 6	**Rapidly Renewable Materials**	1
	1		Credit 7	**Certified Wood**	1
Yes	?	No			
11	3		**Indoor Environmental Quality**		15 Points
Y			Prereq 1	**Minimum IAQ Performance**	Required
Y			Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**	Required
1			Credit 1	**Outdoor Air Delivery Monitoring**	1
1			Credit 2	**Increased Ventilation**	1
1			Credit 3.1	**Construction IAQ Management Plan**, During Construction	1
	1		Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy	1
1			Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants	1
1			Credit 4.2	**Low-Emitting Materials**, Paints & Coatings	1
1			Credit 4.3	**Low-Emitting Materials**, Carpet Systems	1
	1		Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber Products	1
1			Credit 5	**Indoor Chemical & Pollutant Source Control**	1
1			Credit 6.1	**Controllability of Systems**, Lighting	1
			Credit 6.2	**Controllability of Systems**, Thermal Comfort	1
1			Credit 7.1	**Thermal Comfort**, Design	1
1			Credit 7.2	**Thermal Comfort**, Verification	1
	1		Credit 8.1	**Daylight & Views**, Daylight 75% of Spaces	1
1			Credit 8.2	**Daylight & Views**, Views for 90% of Spaces	1
Yes	?	No			
5			**Innovation & Design Process**		5 Points
1			Credit 1.1	**Innovation in Design**: Educational Opportunities	1
1			Credit 1.2	**Innovation in Design**: Green Cleaning	1
1			Credit 1.3	**Innovation in Design**: Building as a Teaching Tool	1
1			Credit 1.4	**Innovation in Design**: Water Efficiency (Exemplary Performance)	1
1			Credit 2	**LEED® Accredited Professional**	1
Yes	?	No			
41	5	22	**Project Totals** (pre-certification estimates)		69 Points

Certified: 26-32 points, **Silver:** 33-38 points, **Gold:** 39-51 points, **Platinum:** 52-69 pc

These credits were submitted to the USGBC for review and any award of certification is pending.

Credits indicated in the “No” column were most often not applicable. Those checked as “?” were attempted, but either reconsidered for financial reasons or lessons were learned in the process that changed our team’s expectations.

Land Use & Community

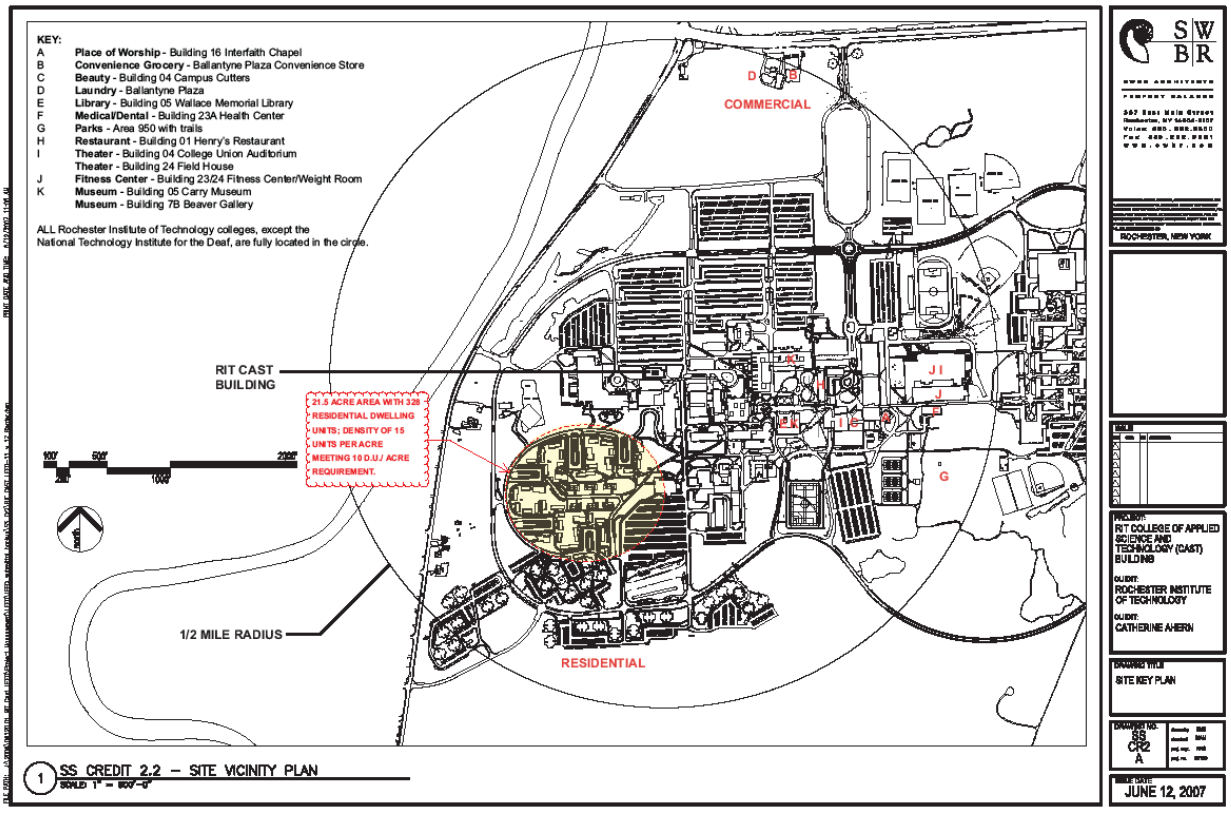
Land use description

Being a campus, RIT had the need for large quad areas as well as the development of a walkable, connected environment. The land use for the project was responsibly structured in preliminary planning.

Prior to the development of the CAST Building a Storm Water Pollution Prevention Plan had been completed that considered land use, parking and stormwater conditions. This framed the manner in which RIT developed several building projects, of which CAST was the only LEED project.

The Project Site connected with the existing fabric of RIT and allowed those that utilize the CAST building to easily access many RIT community features within a half-mile radius, including:

- INTERFAITH CHAPEL
- BALLANTYNE PLAZA
- CAMPUS CUTTERS
- BALLANTYNE PLAZA
- WALLACE LIBRARY
- HEALTH CENTER
- TRAILS
- HENRY'S RESTAURANT
- COLLEGE UNION AUD.
- FIELD HOUSE
- FITNESS CENTER
- CARRY MUSEUM
- BEAVER GALLERY



Site & Water

Site size

Total Property Area: (in Square Feet)	56,628,000
Gross Square Footage: (in Square Feet)	42,956
Total Building Footprint: (in Square Feet)	12,213
Surface parking spaces:	49
Structure Parking Spaces:	0
Undisturbed Site Area:	0
Site Context/Setting:	Suburban
Site Conditions:	Previously Developed

Site conditions

Check as many as apply.

[ ] Pristine land (greenfield)
[X] Previously developed land
[ ] Wetlands
[ ] Running water
[ ] Agricultural land
[ ] Previously undeveloped land
[ ] Brownfield site
[X] Lake/pond
[ ] Sensitive habitat
[ ] Preexisting structure(s)

Site description

The RIT CAST Building has met the criteria for the LEED Rating System's Sustainable Sites Credit 5.2, Site Development: Maximize Open Space, through the creation of a naturally designed pond.

Designed according to the NYSDEC standards for a "wet pond" (P-2), the facility acts as a free form detention/retention pond with an aquatic bench, forebays and deep pool areas. Its permanent pool and shallow marsh areas create suitable growing conditions for emergent vegetation, micro-terrains designed to provide stormwater pollutant removal opportunities and species habitats. The pool area is designed to be maintained through the dry season and an island within the pond adds to the potential habitats for wildlife at this site. Side slope gradients are minimal and vegetated. RIT has committed to preserving the pond in the future.

In developing and landscaping the pond site, RIT has relocated a number of trees and plants from the CAST project site to preserve them and more quickly create a mature, densely landscaped environment.

To eliminate the need for permanent irrigation systems, the plants selected for the project site include trees and shrubs that are capable of tolerating drought conditions. The trees selected include: Maple, Birch, Ash, Locust, Crabapple and Pear trees, all of which are common to the region and suitable for the soil conditions present on the site. Junipers, Arborvitae and Coralberry shrubs are native species that will perform well, along with several drought-tolerant, low-maintenance, ornamental fountain grasses commonly available in this hardiness zone.

Water conservation and use

Describe strategies and technologies that contribute to the conservation of fresh water resources.

This project is utilizing two 1500 gallon storm water storage tanks (see photo). The tanks are sized for the anticipated area rainwater and building anticipated water usage. These will store rain water collected from the building roof. This water will be utilized for the supply to urinals and water closets. In the event there is not enough storm water for this use the potable water system will be used.

Featured Site & Water Strategies

Strategy 1: Low flow Urinal (1/8 gallon flush)
Strategy 2: Rainwater capture for non-potable use
Strategy 3: Drought-tolerant regional landscaping with no irrigation

This reduction in wastewater is due to low flow fixtures and the use of stored rain water. The uploaded documents include the building FTE schedule and the rain water storage pumping detail. The rainwater will be pumped throughout the buiding for use in the urinals and water closets.

Calculations:

Baseline water consumption: 75,700 gallons per year

Indoor potable water use: 58,637 gallons per year (Design)
Outdoor potable water use: 0 gallons per year (Design)
Total potable water consumption: 58,637 gallons per year (Design)

Total non-potable Water Consumption (rainwater capture): 36,000 gallons per year

Total Water Savings: 70.1% (compared to a baseline building)

Energy

Energy use description*

Describe how energy-related issues are addressed in this project. Note that in order for your project description to be displayed on the Department of Energy's Web site, you must also provide energy data, including, at a minimum, total energy use and data sources and reliability.

Energy

At this time there is no on-site energy generation.

Building utilizes external source for its heating and cooling. Building envelope was carefully planed and constructed with pressure barrier to avoid the air infiltration and heat loss through a skin of the building. HVAC system is equipped with Variable Speed Drives (VSD) to operate only at the required energy level. Automated Logic Control system is equipped with programming algorithms to provide most energy efficient operation, including economizing. Occupancy sensors are integrated with VAV air terminals to minimize unnecessary load in response to occupancy changes in each area. Hi-efficiency light fixtures are installed throughout the building and integrated with occupancy sensors System ventilation modes are adjusted base on monitoring of CO2 in dedicated spaces and common return air system. Building is served by VAV to apportion supply air in level required to thermally balance system according to prescribed temperature setpoints.

Since the building was open in April, 2008, there is partial data set for the month of April and full set of data for May and June, 2008. Electrical energy in the building was as follows:

CAST Building Energy Use[1]

Energy Type	April	May	June
Electrical, KWH	44,310	38,950	40,950
Heating, BTU	62,389,880[2]	41,248,050	5,340,370
Cooling BTU	80,265,220[3]	51,466,630	143,088,080

[1] Boiler plants supporting the building are supplied with natural gas.
[2] Heating trending started 4/18/08, data extrapolated for full month
[3] Cooling trending started 4/8/08 , data extrapolated for full month

Please see Appendix B for Utility and Fuel Use Summary Information

Energy security

No energy security measures are incorporated.

Featured Energy Strategies

Strategy 1: VAV System

Strategy 2: Fume Hood Occupancy Sensors

Strategy 3: Occupancy Sensors controlling light and ventilation

Strategy 4: Building Automation System

Strategy 5: Chiller Plant Loading or Chiller Efficiency

Strategy 6: Daylighting and Lighting Control

Strategy 7: Solar Shading

Strategy 8: Green or White roof

Strategy 9: CO_2 Demand Control Ventilation

Strategy 10: Roof Insulation Improvements

Strategy 11: Wall Insulation Improvements

Strategy 12: Glazing Improvements

Materials & Resources

Materials & resources descriptions

Recycled Content

Materials were specified to favor products with high recycled content. Through the use of these products, 20.77% of the total materials cost for the project (post-consumer + ½ pre-consumer) was comprised of recycled content. This increases demand for building products that incorporate recycled content materials, reducing the impacts resulting from extraction and processing of virgin materials.

Regional Materials

Through the use of materials manufactured and harvested within 500 miles of the project site, of which steel studs and concrete played a significant role, nearly 22% of the products used in this project came from within this region. This helps to increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting local resources and reducing the environmental impacts resulting from transportation.

Construction Waste Management

A plan to manage construction waste was developed by the contractor, who targeted a goal of 50% of the construction waste to be diverted from landfill or incineration. The waste was to be segregated on-site, separating the following types of products: Concrete & Masonry, Metal, Wood, Cardboard, and Mixed Debris.

Individual bins were set up in an on-site location to manage this process. As materials were removed from the site, data was collected that is summarized in the LEED template and included in our uploaded documentation.

Concrete waste was sent to The Dolomite Group (Rochester, NY), who recycles these products for reuse as sub-base material in other construction projects.

Metal waste was collected and sent to Genesee (Rochester, NY), who shreds and separates the products into ferrous and non-ferrous products, then sends those pieces forward to be recycled and used to create new metal products.

Wood waste was collected and sent to Terry Tree Service, LLC, a company that mulches and recycles wood waste for landscaping and gardening.

Cardboard waste was collected and sent to JC Fibers, one of North America?s largest paper and cardboard recovery companies, who is based in Rochester, NY and will recycle that waste.

The remaining mixed debris was hauled away as waste.

60% of the waste from this construction project was recycled.

Green materials (products)

The most unique and noticeable product used in the building is a specialty “green wall” from Green Living Technologies (*right*). Green Roof and Wall Products are represented by:

Broccolo Tree and Lawn Care
2059 Brighton-Henrietta Townline Rd.
Rochester, NY 14623
tel: 585.424.4476
877.4LAWNCARE
fax: 585.292.0995

This wall will be a part of the educational display being constructed within the main lobby of the CAST building (*see rendering below*).

Green Living Technologies

Green Roofs, Green Walls & Accessories

1-800-631-8001
www.agreenroof.com




GREEN ROOF SYSTEMS

Extensive
Intensive
Hybrid

- GLT is a single source provider of both pre-grown and planted in place green roofs.
- We specialize in the ultra-lightweight green roof retrofits that can be installed on most existing structures. GLT can also design a rooftop garden to suit your needs.
- Single source warranty for both plant material and green roof components.
- A high percentage of post consumer recycled material and renewable materials, the GLT Roof Panels are a very LEED friendly choice.
- Water management is one of the most innovative features of the GLT roof panels.
- Unlike mesh-type drainage layers which do not hold rain or irrigation water can dry the soil from below, our water retention and drainage carrier *retains* the precious water where the plant roots can easily access it without allowing excessive drying to occur.
- The water retention blanket acts as a filter fabric, water retention and wicking matt also provide exceptional rooting area.

GREEN WALL SYSTEMS

Vertical Walls &
Extreme Sloped
Green Roofs

- The Green Wall is a series of growing media based panels designed to be mounted to a vertical space, free standing or extreme slopes for the purpose of growing vegetation.
- Available in standard one foot increments or custom manufactured as per specification. Both pre-grown and non pre-grown options are available and can be used in small groupings interior and exterior or as part of an awe inspiring feature.
- Choose the depth in relation to your plant material (3" to 6")
- 2 materials to choose from Standard Aluminum and Stainless Steel. Manufactured with stringent quality controls, backed by a minimum 15 year material warranty. We also offer custom finishes eliminating the need for trim details!
- The plant choices can range from herbs and vegetables to long living perennials. The panels were designed with long - term plant health in mind.
- Available as wall mounted or free standing display and can be used as an alternative green roof system for slopes over 20 degrees.

Green Living technologies also donated a 400 SF portion of Green Roof Material to CAST that was installed after construction was completed (see photo above). These innovative technologies are being tested here in CAST for RIT's evaluation and use in future projects. RIT has included temperature sensors in the roof surface beneath the white and vegetated roofs in order to analyze their performance.

Design for adaptability to future uses

The CAST building is designed with a simple plan such that the labs and offices spaces can easily serve another similar tenant or be retrofitted to adapt to new use or future needs.

Indoor Environment

Indoor environment approach

Describe how indoor-environment-related issues are addressed in this project.

Comment on any aspects of indoor environmental quality. These may include control of outdoor pollution, occupant comfort, ventilation and air distribution, moisture control, avoidance of pollution from materials, use of monitoring systems, and building use policies.

Permanent Entryway systems were installed at each main entrance to the facility. These capture dirt and particulates from entering the building where a building is directly connected to the outdoors. These slotted systems allow for cleaning underneath.

Where hazardous gases or chemicals may be present or used (i.e. custodial areas, copy rooms and labs that require chemical use) each space is exhausted sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed.

Self-closing doors and deck to deck partitions are provided. The exhaust rate is minimum 0.50 cfm/sq.ft., with no air recirculation with adequate pressure differential with the surrounding spaces.

Minimum Efficiency Reporting Value (MERV) of 13 Air filtration media is provided. Filtration is applied to process both return and outside air that is to be delivered as supply air.

Fume hoods are provided to manage chemical vapors.

Results

Lessons learned

- Plan early: Sustainable master planning should be considered with regard to lighting, transportation and infrastructure in advance of any project. Master planning can assure a campus that any future development can meet an institution's sustainable goals, and do so more economically.

- Due to the requirements of the LEED Rating system, decisions on all critical systems and building envelope components should be made early and any substitutions carefully considered among all key team members.

- Bring the Commissioning Agent in early.

- Manage sustainable design closely: Sustainable design is not "business as usual" and can require thought, commitment, and often change by anyone from the design team to the occupant.

- Preliminary design concepts had established an aesthetic that provided relatively large windows to the south, which were challenging to work with from an energy standpoint.

- As excited as they may be, do not allow end-users to move in prior to air-quality testing.

- Many of the building products available are made by manufacturers that are up-to-speed on green standards and can provide adequate documentation toward the LEED certification process. Educate all parties, including subcontractors, on the project goals and the process that they need to follow for success and ease.

- Stay as current as possible with regard to technologies, initiatives and requirements.

- Aspiring to a higher standard is an exciting and powerful force when working with the right team.

Ratings

This project has been submitted for certification as a LEED building with the US Green Building Council.

Visuals

Project file information

RIT has developed a web site and has posted a range of information regarding the CAST building and other green initiatives at: http://www.rit.edu/fa/ritgreen/leed_initiative.html.

A time-lapse video of the construction of the Cast building has been created and is available at: http://www.rit.edu/fa/ritgreen/CAST_time_lapse.html.

RIT College of Applied Science and Technology Building
(Main Entrance and South Facade)

Permission: yes
Permission comments: Updated photography should be available in Fall 2008.

For use or digital file, please contact RIT Facilities Management Services at:

RIT Facilities Management Services
Building 99
120 Lomb Memorial Drive
Rochester, NY 14623
tel: 585.475.2842
fax: 585.475.7332

Caption: Main entrance to the RIT College of Applied Science and Technology Building

RIT College of Applied Science and Technology Building
(Main Entrance and North Facade)

Permission: yes
Permission comments: Updated photography should be available in Fall 2008.

For use or digital file, please contact RIT Facilities Management Services at:

RIT Facilities Management Services
Building 99
120 Lomb Memorial Drive
Rochester, NY 14623
tel: 585.475.2842
fax: 585.475.7332

Caption: Main entrance to the RIT College of Applied Science and Technology Building

Learn More

Visiting options

Guided tours are available.

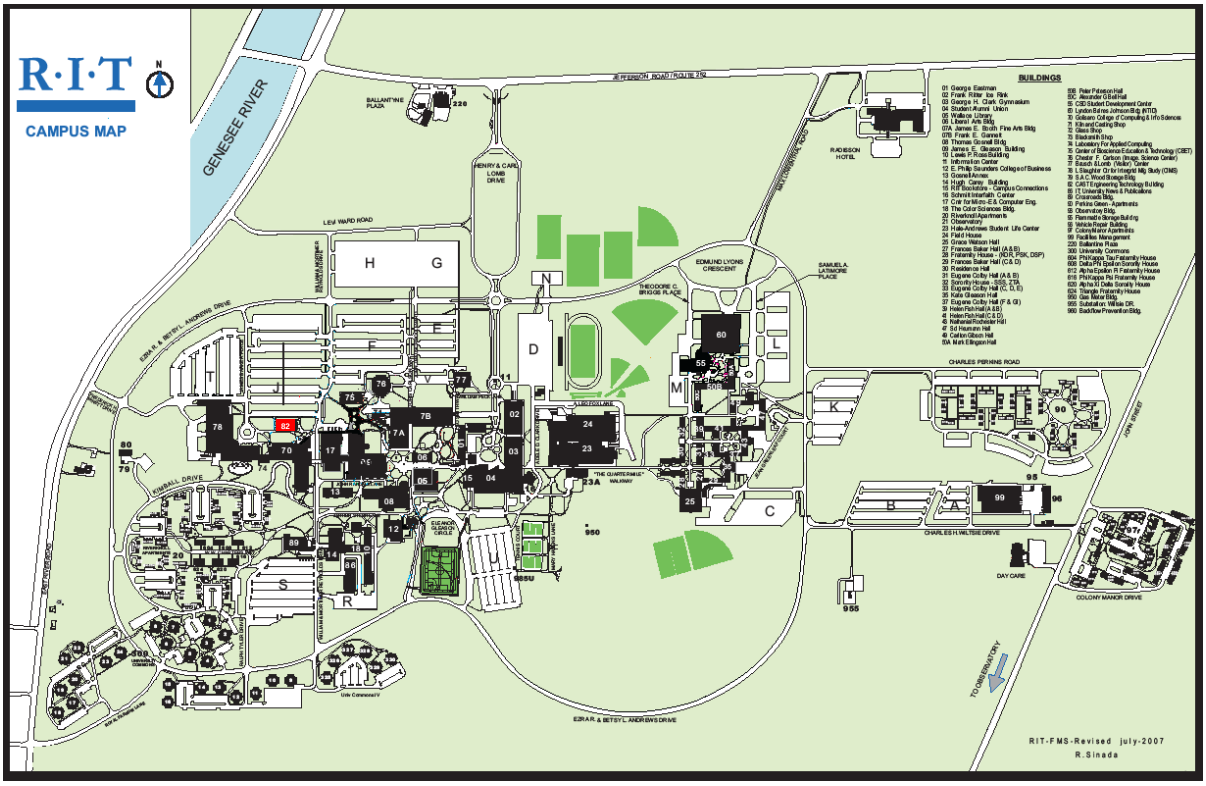
For more information and to arrange a tour:
Rochester Institute of Technology
Facilities Management Services
Building 99
120 Lomb Memorial Drive
Rochester, NY 14623
tel: 585.475.2842
fax: 585.475.7332

Directions:

From the Airport: Turn right onto Brooks Avenue, then a quick right onto I-390 South. From 390, take the next exit (Scottsville Road) and turn right at the end of the ramp. Drive for approximately three miles, then turn left onto Jefferson Road (Route 252). Proceed east a short distance to campus, RIT's main entrance will be on your right.

From the NYS Thruway: Take exit 46 and proceed north on I-390 to exit 13 (Hylan Drive). Take a left onto Hylan Dr. and continue north to Jefferson Road (Route 252), and take a left at the light. Proceed west a short distance to the main campus.

Please consult the www.RIT.edu website to find the latest campus maps; http://www.rit.edu/maps/. The information provided in this map is valid as of: July 2007.



Sources

Information in this document was provided by the following sources:

- Rochester Institute of Technology Facilities Management Services
- SWBR Architects
- M/E Engineering, P.C.

Data reliability

The foregoing constitutes the author's understanding and interpretation of provided documentation. Not for publication.

The information provided here is valid as of: June 2008

Appendix A Full-time Equivalent Employees

RIT CAST Building Full-tim Equivalent (FTE) Calculations

Room Number	Room Name	Number of Full-Time Employees	Number of Part-Time Employees	Estimate # of students	# of classes /week	Notes
1125	Soils/ Materials Lab		1	20	6	classes are typically two hours long
1145	IPL Lab	1		12	2	
1165	Plastics/ Packaging Lab			16	10	
2105	Dept Chair	1				
2106	Program Chair	1				
2110	Office Suite(reception)	3				
2111	Advisor	1				
2132	Program Chair	1				
2134	Program Chair	1				
2136	Office	1				
2138	Office	1				
2151	Adjunct	1				
2152	Office	1				
2154	Office	1				
2155	Office	1				
2156	Office	1				
2158	Office	1				
2125	Projects/ Research Lab			8	3	
2145	Telecom Lab			14	6	
2165	Design Lab		1	20	5	classes are two or three hours long
2180	Opto Lab			8	2	
3102	Dept Chair	1				
3103	Office	1				
3107	Office Suite(reception)	2				
3131	Office	1				
3132	Office	1				
3134	Office	1				
3150	Office	1				
3151	Office	0				
3152	Office	1				
3154	Office	1				
3156	Office	1				
3157	Office	3				
3158	Office	1				
3159	Office	3				
3162	Office	1				
3164	Office	1				
3125	Circuits Studio			16	10	
3145	Electronics Design Lab			16	8	
3165	Environment Lab		1	20	5	classes are two or three hours long
3185	OSHA Center		1	24	5	classes can be 8 hours long

	Transient Occupancy	
	Accessory spaces	
2126	Secure Projects	6
2124	Recording Studio	2
2122	Control room	2
3126	Server	1
	Public Spaces	
1130	McGowan Commons	52
1110	Meeting Room	20
1150	CAST Conference Room	38

	Number of Full-Time Employees	Number of Part-Time Employees	Estimate # of students	Transient Occupancy
Subtotals (from above)	**37**	**4**	**174**	**121**
Factor for typical occupancy	**1**	**1** *	**0.75** **	**0.5** ***
Grand Totals	**37**	**4**	**131**	**61**

Total FTE Occupants	**41**
Total Transient Occupants	**191**

* Part-time employees are considered at a typical occupancy factor of 1, to address the period of shift-overlap (per reference guide).

** Based upon anticipated utilization for each classroom during instruction and anticipating lab use after instruction.

*** Anticipated typical occupancy by visitors is low. Most conference and meeting room utilization will occur through the existing occupants. Transient occupants will be largely limited to special events and building tours. Primary utilization of the noted accessory spaces will typically be restricted to CAST students during lab hours, but these additional utilization values have been provided to address any potential overlap.

Total Typical Occupancy

232

Appendix B Energy data tables

REPORT- PS-B Utility and Fuel Use Summary WEATHER FILE- ROCHESTER, NY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
EM1 ELECTRICITY													
KWH	59819.	53760.	51980.	46262.	46657.	51218.	55893.	54124.	47401.	44234.	43726.	51341.	606415.
MAX KW	145.7	133.3	122.3	123.9	122.6	141.7	141.6	127.5	135.2	113.3	114.2	123.8	145.7
DAY/HR	14/21	6/21	3/21	12/21	5/21	28/21	18/21	8/21	1/21	4/21	29/21	21/21	1/14
ELEV ELECTRICITY													
KWH	275.	262.	315.	278.	302.	302.	278.	315.	278.	288.	275.	278.	3443.
MAX KW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DAY/HR	3/ 9	1/ 9	1/ 9	3/ 9	1/ 9	1/ 9	3/ 9	1/ 9	1/ 9	2/ 9	1/ 9	1/ 9	1/ 3
FM1 NATURAL-GAS													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
HWM1 STEAM													
MBTU	347.	309.	211.	90.	46.	15.	15.	17.	27.	52.	122.	244.	1494.
MAX MBTU/HR	1.2	1.2	0.9	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.9	1.2
DAY/HR	14/24	20/ 5	4/ 5	11/ 5	3/ 5	22/ 5	24/ 4	28/ 4	11/ 6	29/ 5	29/ 5	22/ 5	1/14
DHW STEAM													
MBTU	9.	9.	11.	9.	9.	8.	7.	7.	6.	7.	8.	8.	100.
MAX MBTU/HR	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DAY/HR	3/14	1/14	1/14	3/14	1/14	1/14	3/14	1/14	1/14	2/14	1/14	1/14	3/ 1
HWM2 STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	30/ 2	20/ 7	31/ 6	12/ 2	3/ 5	14/ 6	30/ 5	13/ 5	21/ 2	29/ 4	29/ 4	20/ 7	1/30

REPORT- PS-C Equipment Loads and Energy Use WEATHER FILE- ROCHESTER, NY

MON		COOL LOAD (MBTU) (KBTU/HR)	HEAT LOAD (MBTU) (KBTU/HR)	ELEC USE (KWH) (KW)	FUEL USE (MBTU) (KBTU/HR)		Number of hours within each PART LOAD range 00-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100+	TOTAL RUN HOURS
Chiller 1																		
	SUM	786.4		41474.2		LOAD	858	696	437	321	166	46	18	2	0	0	0	2544
	PEAK	1282.4		57.5		ELEC	291	907	652	320	230	90	43	10	1	0	0	2544
MON/DAY		6/29		6/29														
Cooling Tower																		
	SUM	947.9		1332.0		LOAD	111	503	1678	155	44	24	5	15	3	6	0	2544
	PEAK	1466.4		7.0		ELEC	699	990	24	3	0	0	0	0	0	0	2	1718
MON/DAY		6/29		6/28														
CHW-Pump																		
	SUM			3781.5		FLOW	195	196	136	73	63	48	1548	53	10	222	0	2544
	PEAK			2.7		RPM	0	0	0	0	0	0	469	237	1611	227	0	2544
MON/DAY				5/23		ELEC	0	279	281	95	64	1548	42	13	222	0	0	2544
HW-Pump																		
	SUM			4077.4		FLOW	4596	622	642	962	1077	294	167	18	0	0	0	8378
	PEAK			1.2		RPM	0	0	0	0	0	0	0	5846	2527	5	0	8378
MON/DAY				1/15		ELEC	0	0	5080	1261	1588	318	126	5	0	0	0	8378
HW-RAD Pump																		
	SUM			0.5		FLOW	0	798	1414	1687	1438	1059	473	188	156	109	8	7330
	PEAK			0.0		RPM	0	0	0	0	0	0	0	4357	2866	107	0	7330
MON/DAY				1/29		ELEC	0	0	0	0	0	0	0	0	0	0	7330	7330
CW-Pump																		
	SUM			10892.8		FLOW	0	105	215	278	247	1679	18	2	0	0	0	2544
	PEAK			5.4		RPM	0	0	0	0	0	0	0	0	0	0	2544	2544
MON/DAY				6/29		ELEC	0	0	0	0	38	264	398	1825	19	0	0	2544
DHW-Pump																		

SUM	132.7	FLOW	0	0	0	0	0	0	0	0	0	8760	0	8760
PEAK	0.0	RPM	0	0	0	0	0	0	0	0	0	0	8760	8760
MON/DAY	1/ 1	ELEC	0	0	0	0	0	0	0	0	0	0	8760	8760

REPORT- PS-D Circulation Loop Loads WEATHER FILE- ROCHESTER, NY

MON		COIL LOAD (MBTU) (KBTU/HR)	PIPE GAIN (MBTU) (KBTU/HR)	NET LOAD (MBTU) (KBTU/HR)	OVERLOAD (MBTU) (KBTU/HR)		Number of hours within each PART LOAD range 00-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100+	TOTAL RUN HOURS
HW Loop																		
	SUM	-1481.2	0.0	-1494.4	0.0	HEAT	3906	1651	906	308	80	110	20	0	0	0	0	6981
	PEAK	-1167.0	0.0	-1177.8	0.0	FLOW	4536	575	542	791	1111	517	174	123	9	0	0	8378
	MON/DAY	2/20	0/ 0	1/14	0/ 0													
DHW Loop																		
	SUM	-100.3	0.0	-100.2	0.0	HEAT	2664	768	43	125	189	437	503	393	166	144	0	5432
	PEAK	-67.8	0.0	-67.8	0.0	FLOW	0	0	0	0	0	5760	1000	250	1000	750	0	8760
	MON/DAY	3/ 1	0/ 0	3/ 1	0/ 0													
CHW Loop																		
	SUM	775.7	0.0	786.4	0.0	COOL	763	564	381	351	254	146	46	31	7	1	0	2544
	PEAK	1277.4	0.0	1282.4	0.0	FLOW	184	176	146	69	58	50	72	1529	33	7	220	2544
	MON/DAY	6/29	0/ 0	6/29	0/ 0													
HW Radiation Loop																		
	SUM	-0.3	0.0	-0.3	0.0	HEAT	816	1016	882	851	898	1230	823	409	224	139	42	7330
	PEAK	-0.1	0.0	-0.1	0.0	FLOW	0	0	1858	1330	1466	1275	687	303	169	136	106	7330
	MON/DAY	1/14	0/ 0	1/17	0/ 0													
CW Loop																		
	SUM	913.8	0.0	947.9	0.0	COOL	653	636	412	361	261	144	40	30	6	1	0	2544
	PEAK	1459.0	0.0	1466.4	0.0	FLOW	0	105	215	278	247	1679	18	2	0	0	0	2544
	MON/DAY	6/29	0/ 0	6/29	0/ 0													

REPORT- PS-E Energy End-Use Summary for all Electric Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	10434.	0.	23620.	0.	0.	0.	20610.	3544.	0.	0.	0.	1610.	59819.
MAX KW	37.7	0.0	65.3	0.0	0.0	0.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
DAY/HR	10/10	0/ 0	3/21	0/ 0	0/ 0	0/ 0	14/14	14/24	0/ 0	0/ 0	0/ 0	1/19	14/21
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	
FEB													
KWH	9452.	0.	21348.	0.	0.	0.	18327.	3179.	0.	0.	0.	1454.	53760.
MAX KW	37.1	0.0	65.3	0.0	0.0	0.0	72.4	10.0	0.0	0.0	0.0	4.8	133.3
DAY/HR	10/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	9/ 5	2/ 7	0/ 0	0/ 0	0/ 0	1/19	6/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	42.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	11.9	0.0	49.0	0.0	0.0	0.0	31.8	3.7	0.0	0.0	0.0	3.6	
MAR													
KWH	10597.	0.	23660.	0.	20.	0.	12691.	3402.	0.	0.	0.	1610.	51980.
MAX KW	35.8	0.0	65.3	0.0	10.5	0.0	58.8	13.2	0.0	0.0	0.0	4.8	122.3
DAY/HR	2/10	0/ 0	1/21	0/ 0	1/ 4	0/ 0	4/ 6	1/ 4	0/ 0	0/ 0	0/ 0	1/19	3/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.0	0.0	53.4	0.0	0.0	0.0	25.7	4.1	0.0	0.0	0.0	3.9	
APR													
KWH	9698.	0.	22870.	0.	641.	3.	8182.	3311.	0.	0.	0.	1558.	46262.
MAX KW	35.2	0.0	65.3	0.0	16.1	0.5	52.2	13.2	0.0	0.0	0.0	4.8	123.9
DAY/HR	6/ 9	0/ 0	3/21	0/ 0	14/17	14/17	12/15	10/ 4	0/ 0	0/ 0	0/ 0	1/19	12/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
MAY													
KWH	10144.	0.	23647.	0.	2817.	57.	4629.	3752.	0.	0.	0.	1610.	46657.
MAX KW	34.1	0.0	65.3	0.0	29.3	1.1	51.4	13.2	0.0	0.0	0.0	4.8	122.6
DAY/HR	19/10	0/ 0	1/21	0/ 0	26/13	15/12	5/16	12/ 9	0/ 0	0/ 0	0/ 0	1/19	5/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.7	5.0	0.0	0.0	0.0	4.8	

PEAK PCT	13.0	0.0	53.2	0.0	0.0	0.0	25.9	4.0	0.0	0.0	0.0	3.9	
JUN													
KWH	9914.	0.	22894.	0.	8813.	315.	3359.	4365.	0.	0.	0.	1558.	51218.
MAX KW	34.2	0.0	65.3	0.0	57.5	7.0	24.1	13.2	0.0	0.0	0.0	4.8	141.7
DAY/HR	16/10	0/ 0	1/21	0/ 0	29/15	28/14	14/16	26/ 5	0/ 0	0/ 0	0/ 0	1/19	28/21
PEAK ENDUSE	15.0	0.0	65.3	0.0	39.6	1.1	7.6	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	10.6	0.0	46.1	0.0	28.0	0.8	5.4	5.8	0.0	0.0	0.0	3.4	
JUL													
KWH	9738.	0.	23623.	0.	11654.	415.	3948.	4904.	0.	0.	0.	1610.	55893.
MAX KW	34.7	0.0	65.3	0.0	46.6	1.9	11.5	13.0	0.0	0.0	0.0	4.8	141.6
DAY/HR	24/ 9	0/ 0	3/21	0/ 0	16/17	16/17	30/14	6/ 7	0/ 0	0/ 0	0/ 0	1/19	18/21
PEAK ENDUSE	15.4	0.0	65.3	0.0	38.7	1.1	7.6	8.7	0.0	0.0	0.0	4.8	
PEAK PCT	10.9	0.0	46.1	0.0	27.3	0.8	5.3	6.2	0.0	0.0	0.0	3.4	
AUG													
KWH	10369.	0.	23660.	0.	9550.	325.	3793.	4818.	0.	0.	0.	1610.	54124.
MAX KW	35.2	0.0	65.3	0.0	38.0	1.2	7.6	12.2	0.0	0.0	0.0	4.8	127.5
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	9/14	7/22	9/14	28/ 5	0/ 0	0/ 0	0/ 0	1/19	8/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	25.6	1.1	6.5	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	12.5	0.0	51.2	0.0	20.1	0.9	5.1	6.5	0.0	0.0	0.0	3.7	

REPORT- PS-E Energy End-Use Summary for all Electric Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
KWH	9714.	0.	22870.	0.	6176.	187.	2787.	4109.	0.	0.	0.	1558.	47401.
MAX KW	35.2	0.0	65.3	0.0	41.4	1.1	26.9	13.2	0.0	0.0	0.0	4.8	135.2
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	1/16	1/ 3	21/17	18/ 4	0/ 0	0/ 0	0/ 0	1/19	1/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	32.7	1.1	7.6	7.9	0.0	0.0	0.0	4.8	
PEAK PCT	11.8	0.0	48.3	0.0	24.2	0.8	5.6	5.8	0.0	0.0	0.0	3.5	
OCT													
KWH	10321.	0.	23634.	0.	1482.	25.	3660.	3502.	0.	0.	0.	1610.	44234.
MAX KW	37.2	0.0	65.3	0.0	26.4	1.1	36.7	12.1	0.0	0.0	0.0	4.8	113.3
DAY/HR	18/10	0/ 0	2/21	0/ 0	4/17	4/15	29/15	9/ 8	0/ 0	0/ 0	0/ 0	1/19	4/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	13.9	0.3	6.5	6.6	0.0	0.0	0.0	4.8	
PEAK PCT	14.0	0.0	57.6	0.0	12.3	0.3	5.7	5.8	0.0	0.0	0.0	4.2	
NOV													
KWH	10197.	0.	22867.	0.	320.	6.	5639.	3139.	0.	0.	0.	1558.	43726.
MAX KW	37.4	0.0	65.3	0.0	20.3	0.8	34.3	8.0	0.0	0.0	0.0	4.8	114.2
DAY/HR	27/10	0/ 0	1/21	0/ 0	3/15	3/15	29/14	3/14	0/ 0	0/ 0	0/ 0	1/19	29/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	23.3	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.9	0.0	57.2	0.0	0.0	0.0	20.4	4.3	0.0	0.0	0.0	4.2	
DEC													
KWH	10598.	0.	23623.	0.	0.	0.	12351.	3158.	0.	0.	0.	1610.	51341.
MAX KW	37.6	0.0	65.3	0.0	0.0	0.0	52.6	5.3	0.0	0.0	0.0	4.8	123.8
DAY/HR	11/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	20/14	13/14	0/ 0	0/ 0	0/ 0	1/19	21/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
MAX KW	37.7	0.0	65.3	0.0	57.5	7.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
MON/DY	1/10	0/ 0	1/ 3	0/ 0	6/29	6/28	1/14	1/14	0/ 0	0/ 0	0/ 0	1/ 1	1/14
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	

REPORT- PS-E Energy End-Use Summary for all Fuel Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Fuel Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Steam Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	347.	0.	0.	0.	0.	0.	0.	9.	0.	356.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	14/24	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	14/24
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	309.	0.	0.	0.	0.	0.	0.	9.	0.	318.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	20/ 5
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	211.	0.	0.	0.	0.	0.	0.	11.	0.	222.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	4/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	4/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.	9.	0.	100.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	11/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	46.	0.	0.	0.	0.	0.	0.	9.	0.	55.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	8.	0.	24.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	7.	0.	22.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	24/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	24/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	17.	0.	0.	0.	0.	0.	0.	7.	0.	24.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	28/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	28/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Steam Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	27.	0.	0.	0.	0.	0.	0.	6.	0.	33.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	11/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	52.	0.	0.	0.	0.	0.	0.	7.	0.	59.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/14	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	122.	0.	0.	0.	0.	0.	0.	8.	0.	130.
MAX MBTU/HR	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	244.	0.	0.	0.	0.	0.	0.	8.	0.	252.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	1495.	0.	0.	0.	0.	0.	0.	100.	0.	1595.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
MON/DY	0/ 0	0/ 0	0/ 0	1/14	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 1	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for EM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	10434.	0.	23620.	0.	0.	0.	20610.	3544.	0.	0.	0.	1610.	59819.
MAX KW	37.7	0.0	65.3	0.0	0.0	0.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
DAY/HR	10/10	0/ 0	3/21	0/ 0	0/ 0	0/ 0	14/14	14/24	0/ 0	0/ 0	0/ 0	1/19	14/21
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	
FEB													
KWH	9452.	0.	21348.	0.	0.	0.	18327.	3179.	0.	0.	0.	1454.	53760.
MAX KW	37.1	0.0	65.3	0.0	0.0	0.0	72.4	10.0	0.0	0.0	0.0	4.8	133.3
DAY/HR	10/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	9/ 5	2/ 7	0/ 0	0/ 0	0/ 0	1/19	6/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	42.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	11.9	0.0	49.0	0.0	0.0	0.0	31.8	3.7	0.0	0.0	0.0	3.6	
MAR													
KWH	10597.	0.	23660.	0.	20.	0.	12691.	3402.	0.	0.	0.	1610.	51980.
MAX KW	35.8	0.0	65.3	0.0	10.5	0.0	58.8	13.2	0.0	0.0	0.0	4.8	122.3
DAY/HR	2/10	0/ 0	1/21	0/ 0	1/ 4	0/ 0	4/ 6	1/ 4	0/ 0	0/ 0	0/ 0	1/19	3/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.0	0.0	53.4	0.0	0.0	0.0	25.7	4.1	0.0	0.0	0.0	3.9	
APR													
KWH	9698.	0.	22870.	0.	641.	3.	8182.	3311.	0.	0.	0.	1558.	46262.
MAX KW	35.2	0.0	65.3	0.0	16.1	0.5	52.2	13.2	0.0	0.0	0.0	4.8	123.9
DAY/HR	6/ 9	0/ 0	3/21	0/ 0	14/17	14/17	12/15	10/ 4	0/ 0	0/ 0	0/ 0	1/19	12/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
MAY													
KWH	10144.	0.	23647.	0.	2817.	57.	4629.	3752.	0.	0.	0.	1610.	46657.
MAX KW	34.1	0.0	65.3	0.0	29.3	1.1	51.4	13.2	0.0	0.0	0.0	4.8	122.6
DAY/HR	19/10	0/ 0	1/21	0/ 0	26/13	15/12	5/16	12/ 9	0/ 0	0/ 0	0/ 0	1/19	5/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.7	5.0	0.0	0.0	0.0	4.8	

PEAK PCT	13.0	0.0	53.2	0.0	0.0	0.0	25.9	4.0	0.0	0.0	0.0	3.9	
JUN													
KWH	9914.	0.	22894.	0.	8813.	315.	3359.	4365.	0.	0.	0.	1558.	51218.
MAX KW	34.2	0.0	65.3	0.0	57.5	7.0	24.1	13.2	0.0	0.0	0.0	4.8	141.7
DAY/HR	16/10	0/ 0	1/21	0/ 0	29/15	28/14	14/16	26/ 5	0/ 0	0/ 0	0/ 0	1/19	28/21
PEAK ENDUSE	15.0	0.0	65.3	0.0	39.6	1.1	7.6	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	10.6	0.0	46.1	0.0	28.0	0.8	5.4	5.8	0.0	0.0	0.0	3.4	
JUL													
KWH	9738.	0.	23623.	0.	11654.	415.	3948.	4904.	0.	0.	0.	1610.	55893.
MAX KW	34.7	0.0	65.3	0.0	46.6	1.9	11.5	13.0	0.0	0.0	0.0	4.8	141.6
DAY/HR	24/ 9	0/ 0	3/21	0/ 0	16/17	16/17	30/14	6/ 7	0/ 0	0/ 0	0/ 0	1/19	18/21
PEAK ENDUSE	15.4	0.0	65.3	0.0	38.7	1.1	7.6	8.7	0.0	0.0	0.0	4.8	
PEAK PCT	10.9	0.0	46.1	0.0	27.3	0.8	5.3	6.2	0.0	0.0	0.0	3.4	
AUG													
KWH	10369.	0.	23660.	0.	9550.	325.	3793.	4818.	0.	0.	0.	1610.	54124.
MAX KW	35.2	0.0	65.3	0.0	38.0	1.2	7.6	12.2	0.0	0.0	0.0	4.8	127.5
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	9/14	7/22	9/14	28/ 5	0/ 0	0/ 0	0/ 0	1/19	8/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	25.6	1.1	6.5	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	12.5	0.0	51.2	0.0	20.1	0.9	5.1	6.5	0.0	0.0	0.0	3.7	

REPORT- PS-F Energy End-Use Summary for EM1 WEATHER FILE- ROCHESTER, NY (CONTINUED)

SEP													
KWH	9714.	0.	22870.	0.	6176.	187.	2787.	4109.	0.	0.	0.	1558.	47401.
MAX KW	35.2	0.0	65.3	0.0	41.4	1.1	26.9	13.2	0.0	0.0	0.0	4.8	135.2
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	1/16	1/ 3	21/17	18/ 4	0/ 0	0/ 0	0/ 0	1/19	1/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	32.7	1.1	7.6	7.9	0.0	0.0	0.0	4.8	
PEAK PCT	11.8	0.0	48.3	0.0	24.2	0.8	5.6	5.8	0.0	0.0	0.0	3.5	
OCT													
KWH	10321.	0.	23634.	0.	1482.	25.	3660.	3502.	0.	0.	0.	1610.	44234.
MAX KW	37.2	0.0	65.3	0.0	26.4	1.1	36.7	12.1	0.0	0.0	0.0	4.8	113.3
DAY/HR	18/10	0/ 0	2/21	0/ 0	4/17	4/15	29/15	9/ 8	0/ 0	0/ 0	0/ 0	1/19	4/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	13.9	0.3	6.5	6.6	0.0	0.0	0.0	4.8	
PEAK PCT	14.0	0.0	57.6	0.0	12.3	0.3	5.7	5.8	0.0	0.0	0.0	4.2	
NOV													
KWH	10197.	0.	22867.	0.	320.	6.	5639.	3139.	0.	0.	0.	1558.	43726.
MAX KW	37.4	0.0	65.3	0.0	20.3	0.8	34.3	8.0	0.0	0.0	0.0	4.8	114.2
DAY/HR	27/10	0/ 0	1/21	0/ 0	3/15	3/15	29/14	3/14	0/ 0	0/ 0	0/ 0	1/19	29/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	23.3	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.9	0.0	57.2	0.0	0.0	0.0	20.4	4.3	0.0	0.0	0.0	4.2	
DEC													
KWH	10598.	0.	23623.	0.	0.	0.	12351.	3158.	0.	0.	0.	1610.	51341.
MAX KW	37.6	0.0	65.3	0.0	0.0	0.0	52.6	5.3	0.0	0.0	0.0	4.8	123.8
DAY/HR	11/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	20/14	13/14	0/ 0	0/ 0	0/ 0	1/19	21/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
MAX KW	37.7	0.0	65.3	0.0	57.5	7.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
MON/DY	1/10	0/ 0	1/ 3	0/ 0	6/29	6/28	1/14	1/14	0/ 0	0/ 0	0/ 0	1/ 1	1/14
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for ELEV WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	0.	0.	275.	0.	0.	0.	0.	0.	0.	0.	0.	0.	275.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
KWH	0.	0.	262.	0.	0.	0.	0.	0.	0.	0.	0.	0.	262.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
KWH	0.	0.	315.	0.	0.	0.	0.	0.	0.	0.	0.	0.	315.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
KWH	0.	0.	302.	0.	0.	0.	0.	0.	0.	0.	0.	0.	302.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
KWH	0.	0.	302.	0.	0.	0.	0.	0.	0.	0.	0.	0.	302.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
KWH	0.	0.	315.	0.	0.	0.	0.	0.	0.	0.	0.	0.	315.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for ELEV WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
KWH	0.	0.	288.	0.	0.	0.	0.	0.	0.	0.	0.	0.	288.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	2/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
KWH	0.	0.	275.	0.	0.	0.	0.	0.	0.	0.	0.	0.	275.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
KWH	0.	0.	3443.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3443.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
MON/DY	0/ 0	0/ 0	1/ 3	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 3
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for FM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for FM1 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	347.	0.	0.	0.	0.	0.	0.	0.	0.	347.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	14/24	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	14/24
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	309.	0.	0.	0.	0.	0.	0.	0.	0.	309.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 5
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	211.	0.	0.	0.	0.	0.	0.	0.	0.	211.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	4/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	4/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.	0.	0.	90.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	11/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	46.	0.	0.	0.	0.	0.	0.	0.	0.	46.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	0.	0.	15.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	0.	0.	15.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	24/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	24/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	17.	0.	0.	0.	0.	0.	0.	0.	0.	17.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	28/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	28/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM1 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	27.	0.	0.	0.	0.	0.	0.	0.	0.	27.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	11/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	52.	0.	0.	0.	0.	0.	0.	0.	0.	52.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	122.	0.	0.	0.	0.	0.	0.	0.	0.	122.
MAX MBTU/HR	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	244.	0.	0.	0.	0.	0.	0.	0.	0.	244.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	1494.	0.	0.	0.	0.	0.	0.	0.	0.	1494.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
MON/DY	0/ 0	0/ 0	0/ 0	1/14	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for DHW M WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	0.	11.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	

REPORT- PS-F Energy End-Use Summary for DHW M WEATHER FILE- ROCHESTER, NY (CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.	6.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/14	0/ 0	2/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	100.	0.	100.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 1	0/ 0	3/ 1
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM2 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	30/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	30/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 7	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 7
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	31/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	31/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	12/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	12/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	14/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	14/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	30/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	30/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	13/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	13/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM2 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	21/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	21/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 7	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 7
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	1/30	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/30
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- BEPS Building Energy Performance WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1 ELECTRICITY													
MBTU	413.6	0.0	949.9	0.0	141.6	4.5	341.2	154.2	0.0	0.0	0.0	64.7	2069.7
FM1 NATURAL-GAS													
MBTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HWM1 STEAM													
MBTU	0.0	0.0	0.0	1494.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1494.4
DHW STEAM													
MBTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.2	0.0	100.2
HWM2 STEAM													
MBTU	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
MBTU	413.6	0.0	949.9	1494.6	141.6	4.5	341.2	154.2	0.0	0.0	100.2	64.7	3664.5

TOTAL SITE ENERGY 3664.55 MBTU 105.7 KBTU/SQFT-YR GROSS-AREA 105.7 KBTU/SQFT-YR NET-AREA
TOTAL SOURCE ENERGY 8867.16 MBTU 255.8 KBTU/SQFT-YR GROSS-AREA 255.8 KBTU/SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 0.0
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

REPORT- BEPU Building Utility Performance WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1 ELECTRICITY													
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
FM1 NATURAL-GAS													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
HWM1 STEAM													
MBTU	0.	0.	0.	1494.	0.	0.	0.	0.	0.	0.	0.	0.	1494.
DHW STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	100.	0.	100.
HWM2 STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TOTAL ELECTRICITY 606415. KWH 17.494 KWH /SQFT-YR GROSS-AREA 17.494 KWH /SQFT-YR NET-AREA
TOTAL STEAM 1595. MBTU 0.046 MBTU /SQFT-YR GROSS-AREA 0.046 MBTU /SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 0.0
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

REPORT- ES-D Energy Cost Summary WEATHER FILE- ROCHESTER, NY

UTILITY-RATE	RESOURCE	METERS	METERED ENERGY UNITS/YR	TOTAL CHARGE ($)	VIRTUAL RATE ($/UNIT)	RATE USED ALL YEAR?
ELEC-TARIFF	ELECTRICITY	EM1	787935. KWH	83013.	0.1054	YES
Gas Rate	NATURAL-GAS	FM1	32245. THERM	28053.	0.8700	YES
HW Rate	STEAM	DHW	100. MBTU	1453.	14.5000	YES
				112519.		

ENERGY COST/GROSS BLDG AREA: 3.25
ENERGY COST/NET BLDG AREA: 3.25

REPORT- ES-E Summary of Utility-Rate: ELEC-TARIFF WEATHER FILE- ROCHESTER, NY

RESOURCE: ELECTRICITY DEMAND-INTERVAL 30 3413. BTU/KWH
BILLING-DAY: 31 RATE-LIMITATION: 0.0000
METERS: EM1
POWER-FACTOR: 0.80 EXCESS-KVAR-FRAC: 0.75 EXCESS-KVAR-CHG: 0.0000

RATE-QUALIFICATIONS
MIN-ENERGY: 0.0
MAX-ENERGY: 0.0
MIN-DEMAND: 0.0
MAX-DEMAND: 0.0
QUALIFY-RATE: ALL YEAR
USE-MIN-QUAL: NO

BLOCK-CHARGES

DEMAND-RATCHETS

MIN-MON-RATCHETS

MONTH	METERED ENERGY KWH	BILLING ENERGY KWH	METERED DEMAND KW	BILLING DEMAND KW	ENERGY CHARGE ($)	DEMAND CHARGE ($)	ENERGY CST ADJ ($)	TAXES ($)	SURCHRG ($)	FIXED CHARGE ($)	MINIMUM CHARGE ($)	VIRTUAL RATE ($/UNIT)	TOTAL CHARGE ($)
JAN	83099	83099	170.7	170.7	6986	1355	0	0	0	0	700	0.1004	8341
FEB	74538	74538	176.8	176.8	6277	1404	0	0	0	0	700	0.1030	7681
MAR	72461	72461	160.7	160.7	6146	1276	0	0	0	0	700	0.1024	7422
APR	59654	59654	155.8	155.8	5139	1237	0	0	0	0	700	0.1069	6376
MAY	58145	58145	153.7	153.7	5092	1220	0	0	0	0	700	0.1086	6312
JUN	63107	63107	172.9	172.9	5557	1373	0	0	0	0	700	0.1098	6930
JUL	68116	68116	163.1	163.1	6008	1295	0	0	0	0	700	0.1072	7303
AUG	66393	66393	147.4	147.4	5832	1170	0	0	0	0	700	0.1055	7002
SEP	56863	56863	152.1	152.1	4990	1208	0	0	0	0	700	0.1090	6198

OCT	54192	54192	127.5	127.5	4714	1012	0	0	0	0	700	0.1057	5726
NOV	58095	58095	154.1	154.1	4968	1223	0	0	0	0	700	0.1066	6191
DEC	73272	73272	168.5	168.5	6191	1338	0	0	0	0	700	0.1028	7530
TOTAL	787935	787935	176.8		67901	15112	0	0	0	0		0.1054	83013

REPORT- ES-E Summary of Utility-Rate: Gas Rate WEATHER FILE- ROCHESTER, NY

RESOURCE: NATURAL-GAS DEMAND-INTERVAL 60 100000. BTU/THERM
BILLING-DAY: 31 RATE-LIMITATION: 0.0000
METERS: FM1

RATE-QUALIFICATIONS

MIN-ENERGY: 0.0
MAX-ENERGY: 0.0
MIN-DEMAND: 0.0
MAX-DEMAND: 0.0
QUALIFY-RATE: ALL YEAR
USE-MIN-QUAL: NO

BLOCK-CHARGES

DEMAND-RATCHETS

MIN-MON-RATCHETS

MONTH	METERED ENERGY THERM	BILLING ENERGY THERM	METERED DEMAND THERM/HR	BILLING DEMAND THERM/HR	ENERGY CHARGE ($)	DEMAND CHARGE ($)	ENERGY CST ADJ ($)	TAXES ($)	SURCHRG ($)	FIXED CHARGE ($)	MINIMUM CHARGE ($)	VIRTUAL RATE ($/UNIT)	TOTAL CHARGE ($)
JAN	6936	6936	16.8	16.8	6034	0	0	0	0	0	0	0.8700	6034
FEB	6189	6189	17.0	17.0	5384	0	0	0	0	0	0	0.8700	5384
MAR	4764	4764	13.3	13.3	4145	0	0	0	0	0	0	0.8700	4145
APR	2071	2071	9.2	9.2	1802	0	0	0	0	0	0	0.8700	1802
MAY	1002	1002	7.5	7.5	872	0	0	0	0	0	0	0.8700	872
JUN	348	348	3.4	3.4	303	0	0	0	0	0	0	0.8700	303
JUL	322	322	2.9	2.9	280	0	0	0	0	0	0	0.8700	280
AUG	350	350	3.7	3.7	305	0	0	0	0	0	0	0.8700	305
SEP	476	476	5.9	5.9	415	0	0	0	0	0	0	0.8700	415

OCT	1125	1125	7.0	7.0	979	0	0	0	0	0	0	0.8700	979
NOV	2987	2987	10.7	10.7	2598	0	0	0	0	0	0	0.8700	2598
DEC	5674	5674	13.9	13.9	4937	0	0	0	0	0	0	0.8700	4937
TOTAL	32245	32245	17.0		28053	0	0	0	0	0		0.8700	28053

REPORT- ES-E Summary of Utility-Rate: HW Rate WEATHER FILE- ROCHESTER, NY

RESOURCE: STEAM DEMAND-INTERVAL 60 1000000. BTU/MBTU
BILLING-DAY: 31 RATE-LIMITATION: 0.0000
METERS: DHW

RATE-QUALIFICATIONS		BLOCK-CHARGES	DEMAND-RATCHETS	MIN-MON-RATCHETS
MIN-ENERGY:	0.0			
MAX-ENERGY:	0.0			
MIN-DEMAND:	0.0			
MAX-DEMAND:	0.0			
QUALIFY-RATE:	ALL YEAR			
USE-MIN-QUAL:	NO			

MONTH	METERED ENERGY MBTU	BILLING ENERGY MBTU	METERED DEMAND MBTU/HR	BILLING DEMAND MBTU/HR	ENERGY CHARGE ($)	DEMAND CHARGE ($)	ENERGY CST ADJ ($)	TAXES ($)	SURCHRG ($)	FIXED CHARGE ($)	MINIMUM CHARGE ($)	VIRTUAL RATE ($/UNIT)	TOTAL CHARGE ($)
JAN	9	9	0.1	0.1	132	0	0	0	0	0	0	14.5000	132
FEB	9	9	0.1	0.1	131	0	0	0	0	0	0	14.5000	131
MAR	11	11	0.1	0.1	159	0	0	0	0	0	0	14.5000	159
APR	9	9	0.1	0.1	136	0	0	0	0	0	0	14.5000	136
MAY	9	9	0.1	0.1	135	0	0	0	0	0	0	14.5000	135
JUN	8	8	0.1	0.1	122	0	0	0	0	0	0	14.5000	122
JUL	7	7	0.0	0.0	101	0	0	0	0	0	0	14.5000	101
AUG	7	7	0.0	0.0	108	0	0	0	0	0	0	14.5000	108
SEP	6	6	0.0	0.0	94	0	0	0	0	0	0	14.5000	94

OCT	7	7	0.0	0.0	104	0	0	0	0	0	0	14.5000	104
NOV	8	8	0.1	0.1	109	0	0	0	0	0	0	14.5000	109
DEC	8	8	0.1	0.1	122	0	0	0	0	0	0	14.5000	122
TOTAL	100	100	0.1		1453	0	0	0	0	0		14.5000	1453

REPORT- PS-B Utility and Fuel Use Summary WEATHER FILE- ROCHESTER, NY

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
EM1 ELECTRICITY													
KWH	59819.	53760.	51980.	46262.	46657.	51218.	55893.	54124.	47401.	44234.	43726.	51341.	606415.
MAX KW	145.7	133.3	122.3	123.9	122.6	141.7	141.6	127.5	135.2	113.3	114.2	123.8	145.7
DAY/HR	14/21	6/21	3/21	12/21	5/21	28/21	18/21	8/21	1/21	4/21	29/21	21/21	1/14
ELEV ELECTRICITY													
KWH	275.	262.	315.	278.	302.	302.	278.	315.	278.	288.	275.	278.	3443.
MAX KW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DAY/HR	3/ 9	1/ 9	1/ 9	3/ 9	1/ 9	1/ 9	3/ 9	1/ 9	1/ 9	2/ 9	1/ 9	1/ 9	1/ 3
FM1 NATURAL-GAS													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
HWM1 STEAM													
MBTU	347.	309.	211.	90.	46.	15.	15.	17.	27.	52.	122.	244.	1494.
MAX MBTU/HR	1.2	1.2	0.9	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.9	1.2
DAY/HR	14/24	20/ 5	4/ 5	11/ 5	3/ 5	22/ 5	24/ 4	28/ 4	11/ 6	29/ 5	29/ 5	22/ 5	1/14
DHW STEAM													
MBTU	9.	9.	11.	9.	9.	8.	7.	7.	6.	7.	8.	8.	100.
MAX MBTU/HR	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DAY/HR	3/14	1/14	1/14	3/14	1/14	1/14	3/14	1/14	1/14	2/14	1/14	1/14	3/ 1
HWM2 STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	30/ 2	20/ 7	31/ 6	12/ 2	3/ 5	14/ 6	30/ 5	13/ 5	21/ 2	29/ 4	29/ 4	20/ 7	1/30

REPORT- PS-C Equipment Loads and Energy Use WEATHER FILE- ROCHESTER, NY

MON		COOL LOAD (MBTU) (KBTU/HR)	HEAT LOAD (MBTU) (KBTU/HR)	ELEC USE (KWH) (KW)	FUEL USE (MBTU) (KBTU/HR)		Number of hours within each PART LOAD range 00-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100+	TOTAL RUN HOURS
Chiller 1																		
	SUM	786.4		41474.2		LOAD	858	696	437	321	166	46	18	2	0	0	0	2544
	PEAK	1282.4		57.5		ELEC	291	907	652	320	230	90	43	10	1	0	0	2544
MON/DAY		6/29		6/29														
Cooling Tower																		
	SUM	947.9		1332.0		LOAD	111	503	1678	155	44	24	5	15	3	6	0	2544
	PEAK	1466.4		7.0		ELEC	699	990	24	3	0	0	0	0	0	0	2	1718
MON/DAY		6/29		6/28														
CHW-Pump																		
	SUM			3781.5		FLOW	195	196	136	73	63	48	1548	53	10	222	0	2544
	PEAK			2.7		RPM	0	0	0	0	0	0	469	237	1611	227	0	2544
MON/DAY				5/23		ELEC	0	279	281	95	64	1548	42	13	222	0	0	2544
HW-Pump																		
	SUM			4077.4		FLOW	4596	622	642	962	1077	294	167	18	0	0	0	8378
	PEAK			1.2		RPM	0	0	0	0	0	0	0	5846	2527	5	0	8378
MON/DAY				1/15		ELEC	0	0	5080	1261	1588	318	126	5	0	0	0	8378
HW-RAD Pump																		
	SUM			0.5		FLOW	0	798	1414	1687	1438	1059	473	188	156	109	8	7330
	PEAK			0.0		RPM	0	0	0	0	0	0	0	4357	2866	107	0	7330
MON/DAY				1/29		ELEC	0	0	0	0	0	0	0	0	0	0	7330	7330
CW-Pump																		
	SUM			10892.8		FLOW	0	105	215	278	247	1679	18	2	0	0	0	2544
	PEAK			5.4		RPM	0	0	0	0	0	0	0	0	0	0	2544	2544
MON/DAY				6/29		ELEC	0	0	0	0	38	264	398	1825	19	0	0	2544
DHW-Pump																		

SUM	132.7	FLOW	0	0	0	0	0	0	0	0	0	8760	0	8760
PEAK	0.0	RPM	0	0	0	0	0	0	0	0	0	0	8760	8760
MON/DAY	1/ 1	ELEC	0	0	0	0	0	0	0	0	0	0	8760	8760

REPORT- PS-D Circulation Loop Loads WEATHER FILE- ROCHESTER, NY

MON		COIL LOAD (MBTU) (KBTU/HR)	PIPE GAIN (MBTU) (KBTU/HR)	NET LOAD (MBTU) (KBTU/HR)	OVERLOAD (MBTU) (KBTU/HR)		Number of hours within each PART LOAD range 00-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100+	TOTAL RUN HOURS
HW Loop																		
	SUM	-1481.2	0.0	-1494.4	0.0	HEAT	3906	1651	906	308	80	110	20	0	0	0	0	6981
	PEAK	-1167.0	0.0	-1177.8	0.0	FLOW	4536	575	542	791	1111	517	174	123	9	0	0	8378
	MON/DAY	2/20	0/ 0	1/14	0/ 0													
DHW Loop																		
	SUM	-100.3	0.0	-100.2	0.0	HEAT	2664	768	43	125	189	437	503	393	166	144	0	5432
	PEAK	-67.8	0.0	-67.8	0.0	FLOW	0	0	0	0	0	5760	1000	250	1000	750	0	8760
	MON/DAY	3/ 1	0/ 0	3/ 1	0/ 0													
CHW Loop																		
	SUM	775.7	0.0	786.4	0.0	COOL	763	564	381	351	254	146	46	31	7	1	0	2544
	PEAK	1277.4	0.0	1282.4	0.0	FLOW	184	176	146	69	58	50	72	1529	33	7	220	2544
	MON/DAY	6/29	0/ 0	6/29	0/ 0													
HW Radiation Loop																		
	SUM	-0.3	0.0	-0.3	0.0	HEAT	816	1016	882	851	898	1230	823	409	224	139	42	7330
	PEAK	-0.1	0.0	-0.1	0.0	FLOW	0	0	1858	1330	1466	1275	687	303	169	136	106	7330
	MON/DAY	1/14	0/ 0	1/17	0/ 0													
CW Loop																		
	SUM	913.8	0.0	947.9	0.0	COOL	653	636	412	361	261	144	40	30	6	1	0	2544
	PEAK	1459.0	0.0	1466.4	0.0	FLOW	0	105	215	278	247	1679	18	2	0	0	0	2544
	MON/DAY	6/29	0/ 0	6/29	0/ 0													

REPORT- PS-E Energy End-Use Summary for all Electric Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	10434.	0.	23620.	0.	0.	0.	20610.	3544.	0.	0.	0.	1610.	59819.
MAX KW	37.7	0.0	65.3	0.0	0.0	0.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
DAY/HR	10/10	0/ 0	3/21	0/ 0	0/ 0	0/ 0	14/14	14/24	0/ 0	0/ 0	0/ 0	1/19	14/21
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	
FEB													
KWH	9452.	0.	21348.	0.	0.	0.	18327.	3179.	0.	0.	0.	1454.	53760.
MAX KW	37.1	0.0	65.3	0.0	0.0	0.0	72.4	10.0	0.0	0.0	0.0	4.8	133.3
DAY/HR	10/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	9/ 5	2/ 7	0/ 0	0/ 0	0/ 0	1/19	6/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	42.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	11.9	0.0	49.0	0.0	0.0	0.0	31.8	3.7	0.0	0.0	0.0	3.6	
MAR													
KWH	10597.	0.	23660.	0.	20.	0.	12691.	3402.	0.	0.	0.	1610.	51980.
MAX KW	35.8	0.0	65.3	0.0	10.5	0.0	58.8	13.2	0.0	0.0	0.0	4.8	122.3
DAY/HR	2/10	0/ 0	1/21	0/ 0	1/ 4	0/ 0	4/ 6	1/ 4	0/ 0	0/ 0	0/ 0	1/19	3/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.0	0.0	53.4	0.0	0.0	0.0	25.7	4.1	0.0	0.0	0.0	3.9	
APR													
KWH	9698.	0.	22870.	0.	641.	3.	8182.	3311.	0.	0.	0.	1558.	46262.
MAX KW	35.2	0.0	65.3	0.0	16.1	0.5	52.2	13.2	0.0	0.0	0.0	4.8	123.9
DAY/HR	6/ 9	0/ 0	3/21	0/ 0	14/17	14/17	12/15	10/ 4	0/ 0	0/ 0	0/ 0	1/19	12/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
MAY													
KWH	10144.	0.	23647.	0.	2817.	57.	4629.	3752.	0.	0.	0.	1610.	46657.
MAX KW	34.1	0.0	65.3	0.0	29.3	1.1	51.4	13.2	0.0	0.0	0.0	4.8	122.6
DAY/HR	19/10	0/ 0	1/21	0/ 0	26/13	15/12	5/16	12/ 9	0/ 0	0/ 0	0/ 0	1/19	5/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.7	5.0	0.0	0.0	0.0	4.8	

PEAK PCT	13.0	0.0	53.2	0.0	0.0	0.0	25.9	4.0	0.0	0.0	0.0	3.9	
JUN													
KWH	9914.	0.	22894.	0.	8813.	315.	3359.	4365.	0.	0.	0.	1558.	51218.
MAX KW	34.2	0.0	65.3	0.0	57.5	7.0	24.1	13.2	0.0	0.0	0.0	4.8	141.7
DAY/HR	16/10	0/ 0	1/21	0/ 0	29/15	28/14	14/16	26/ 5	0/ 0	0/ 0	0/ 0	1/19	28/21
PEAK ENDUSE	15.0	0.0	65.3	0.0	39.6	1.1	7.6	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	10.6	0.0	46.1	0.0	28.0	0.8	5.4	5.8	0.0	0.0	0.0	3.4	
JUL													
KWH	9738.	0.	23623.	0.	11654.	415.	3948.	4904.	0.	0.	0.	1610.	55893.
MAX KW	34.7	0.0	65.3	0.0	46.6	1.9	11.5	13.0	0.0	0.0	0.0	4.8	141.6
DAY/HR	24/ 9	0/ 0	3/21	0/ 0	16/17	16/17	30/14	6/ 7	0/ 0	0/ 0	0/ 0	1/19	18/21
PEAK ENDUSE	15.4	0.0	65.3	0.0	38.7	1.1	7.6	8.7	0.0	0.0	0.0	4.8	
PEAK PCT	10.9	0.0	46.1	0.0	27.3	0.8	5.3	6.2	0.0	0.0	0.0	3.4	
AUG													
KWH	10369.	0.	23660.	0.	9550.	325.	3793.	4818.	0.	0.	0.	1610.	54124.
MAX KW	35.2	0.0	65.3	0.0	38.0	1.2	7.6	12.2	0.0	0.0	0.0	4.8	127.5
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	9/14	7/22	9/14	28/ 5	0/ 0	0/ 0	0/ 0	1/19	8/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	25.6	1.1	6.5	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	12.5	0.0	51.2	0.0	20.1	0.9	5.1	6.5	0.0	0.0	0.0	3.7	

REPORT- PS-E Energy End-Use Summary for all Electric Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
KWH	9714.	0.	22870.	0.	6176.	187.	2787.	4109.	0.	0.	0.	1558.	47401.
MAX KW	35.2	0.0	65.3	0.0	41.4	1.1	26.9	13.2	0.0	0.0	0.0	4.8	135.2
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	1/16	1/ 3	21/17	18/ 4	0/ 0	0/ 0	0/ 0	1/19	1/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	32.7	1.1	7.6	7.9	0.0	0.0	0.0	4.8	
PEAK PCT	11.8	0.0	48.3	0.0	24.2	0.8	5.6	5.8	0.0	0.0	0.0	3.5	
OCT													
KWH	10321.	0.	23634.	0.	1482.	25.	3660.	3502.	0.	0.	0.	1610.	44234.
MAX KW	37.2	0.0	65.3	0.0	26.4	1.1	36.7	12.1	0.0	0.0	0.0	4.8	113.3
DAY/HR	18/10	0/ 0	2/21	0/ 0	4/17	4/15	29/15	9/ 8	0/ 0	0/ 0	0/ 0	1/19	4/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	13.9	0.3	6.5	6.6	0.0	0.0	0.0	4.8	
PEAK PCT	14.0	0.0	57.6	0.0	12.3	0.3	5.7	5.8	0.0	0.0	0.0	4.2	
NOV													
KWH	10197.	0.	22867.	0.	320.	6.	5639.	3139.	0.	0.	0.	1558.	43726.
MAX KW	37.4	0.0	65.3	0.0	20.3	0.8	34.3	8.0	0.0	0.0	0.0	4.8	114.2
DAY/HR	27/10	0/ 0	1/21	0/ 0	3/15	3/15	29/14	3/14	0/ 0	0/ 0	0/ 0	1/19	29/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	23.3	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.9	0.0	57.2	0.0	0.0	0.0	20.4	4.3	0.0	0.0	0.0	4.2	
DEC													
KWH	10598.	0.	23623.	0.	0.	0.	12351.	3158.	0.	0.	0.	1610.	51341.
MAX KW	37.6	0.0	65.3	0.0	0.0	0.0	52.6	5.3	0.0	0.0	0.0	4.8	123.8
DAY/HR	11/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	20/14	13/14	0/ 0	0/ 0	0/ 0	1/19	21/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
MAX KW	37.7	0.0	65.3	0.0	57.5	7.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
MON/DY	1/10	0/ 0	1/ 3	0/ 0	6/29	6/28	1/14	1/14	0/ 0	0/ 0	0/ 0	1/ 1	1/14
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	

REPORT- PS-E Energy End-Use Summary for all Fuel Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Fuel Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Steam Meters WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	347.	0.	0.	0.	0.	0.	0.	9.	0.	356.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	14/24	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	14/24
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	309.	0.	0.	0.	0.	0.	0.	9.	0.	318.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	20/ 5
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	211.	0.	0.	0.	0.	0.	0.	11.	0.	222.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	4/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	4/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.	9.	0.	100.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	11/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	46.	0.	0.	0.	0.	0.	0.	9.	0.	55.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	8.	0.	24.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	7.	0.	22.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	24/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	24/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	17.	0.	0.	0.	0.	0.	0.	7.	0.	24.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	28/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	28/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-E Energy End-Use Summary for all Steam Meters WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	27.	0.	0.	0.	0.	0.	0.	6.	0.	33.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	11/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	52.	0.	0.	0.	0.	0.	0.	7.	0.	59.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/14	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	122.	0.	0.	0.	0.	0.	0.	8.	0.	130.
MAX MBTU/HR	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	244.	0.	0.	0.	0.	0.	0.	8.	0.	252.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	1495.	0.	0.	0.	0.	0.	0.	100.	0.	1595.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.2
MON/DY	0/ 0	0/ 0	0/ 0	1/14	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 1	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for EM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	10434.	0.	23620.	0.	0.	0.	20610.	3544.	0.	0.	0.	1610.	59819.
MAX KW	37.7	0.0	65.3	0.0	0.0	0.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
DAY/HR	10/10	0/ 0	3/21	0/ 0	0/ 0	0/ 0	14/14	14/24	0/ 0	0/ 0	0/ 0	1/19	14/21
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	
FEB													
KWH	9452.	0.	21348.	0.	0.	0.	18327.	3179.	0.	0.	0.	1454.	53760.
MAX KW	37.1	0.0	65.3	0.0	0.0	0.0	72.4	10.0	0.0	0.0	0.0	4.8	133.3
DAY/HR	10/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	9/ 5	2/ 7	0/ 0	0/ 0	0/ 0	1/19	6/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	42.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	11.9	0.0	49.0	0.0	0.0	0.0	31.8	3.7	0.0	0.0	0.0	3.6	
MAR													
KWH	10597.	0.	23660.	0.	20.	0.	12691.	3402.	0.	0.	0.	1610.	51980.
MAX KW	35.8	0.0	65.3	0.0	10.5	0.0	58.8	13.2	0.0	0.0	0.0	4.8	122.3
DAY/HR	2/10	0/ 0	1/21	0/ 0	1/ 4	0/ 0	4/ 6	1/ 4	0/ 0	0/ 0	0/ 0	1/19	3/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.4	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.0	0.0	53.4	0.0	0.0	0.0	25.7	4.1	0.0	0.0	0.0	3.9	
APR													
KWH	9698.	0.	22870.	0.	641.	3.	8182.	3311.	0.	0.	0.	1558.	46262.
MAX KW	35.2	0.0	65.3	0.0	16.1	0.5	52.2	13.2	0.0	0.0	0.0	4.8	123.9
DAY/HR	6/ 9	0/ 0	3/21	0/ 0	14/17	14/17	12/15	10/ 4	0/ 0	0/ 0	0/ 0	1/19	12/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
MAY													
KWH	10144.	0.	23647.	0.	2817.	57.	4629.	3752.	0.	0.	0.	1610.	46657.
MAX KW	34.1	0.0	65.3	0.0	29.3	1.1	51.4	13.2	0.0	0.0	0.0	4.8	122.6
DAY/HR	19/10	0/ 0	1/21	0/ 0	26/13	15/12	5/16	12/ 9	0/ 0	0/ 0	0/ 0	1/19	5/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	31.7	5.0	0.0	0.0	0.0	4.8	

PEAK PCT	13.0	0.0	53.2	0.0	0.0	0.0	25.9	4.0	0.0	0.0	0.0	3.9	
JUN													
KWH	9914.	0.	22894.	0.	8813.	315.	3359.	4365.	0.	0.	0.	1558.	51218.
MAX KW	34.2	0.0	65.3	0.0	57.5	7.0	24.1	13.2	0.0	0.0	0.0	4.8	141.7
DAY/HR	16/10	0/ 0	1/21	0/ 0	29/15	28/14	14/16	26/ 5	0/ 0	0/ 0	0/ 0	1/19	28/21
PEAK ENDUSE	15.0	0.0	65.3	0.0	39.6	1.1	7.6	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	10.6	0.0	46.1	0.0	28.0	0.8	5.4	5.8	0.0	0.0	0.0	3.4	
JUL													
KWH	9738.	0.	23623.	0.	11654.	415.	3948.	4904.	0.	0.	0.	1610.	55893.
MAX KW	34.7	0.0	65.3	0.0	46.6	1.9	11.5	13.0	0.0	0.0	0.0	4.8	141.6
DAY/HR	24/ 9	0/ 0	3/21	0/ 0	16/17	16/17	30/14	6/ 7	0/ 0	0/ 0	0/ 0	1/19	18/21
PEAK ENDUSE	15.4	0.0	65.3	0.0	38.7	1.1	7.6	8.7	0.0	0.0	0.0	4.8	
PEAK PCT	10.9	0.0	46.1	0.0	27.3	0.8	5.3	6.2	0.0	0.0	0.0	3.4	
AUG													
KWH	10369.	0.	23660.	0.	9550.	325.	3793.	4818.	0.	0.	0.	1610.	54124.
MAX KW	35.2	0.0	65.3	0.0	38.0	1.2	7.6	12.2	0.0	0.0	0.0	4.8	127.5
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	9/14	7/22	9/14	28/ 5	0/ 0	0/ 0	0/ 0	1/19	8/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	25.6	1.1	6.5	8.3	0.0	0.0	0.0	4.8	
PEAK PCT	12.5	0.0	51.2	0.0	20.1	0.9	5.1	6.5	0.0	0.0	0.0	3.7	

REPORT- PS-F Energy End-Use Summary for EM1 WEATHER FILE- ROCHESTER, NY (CONTINUED)

SEP													
KWH	9714.	0.	22870.	0.	6176.	187.	2787.	4109.	0.	0.	0.	1558.	47401.
MAX KW	35.2	0.0	65.3	0.0	41.4	1.1	26.9	13.2	0.0	0.0	0.0	4.8	135.2
DAY/HR	22/ 9	0/ 0	1/21	0/ 0	1/16	1/ 3	21/17	18/ 4	0/ 0	0/ 0	0/ 0	1/19	1/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	32.7	1.1	7.6	7.9	0.0	0.0	0.0	4.8	
PEAK PCT	11.8	0.0	48.3	0.0	24.2	0.8	5.6	5.8	0.0	0.0	0.0	3.5	
OCT													
KWH	10321.	0.	23634.	0.	1482.	25.	3660.	3502.	0.	0.	0.	1610.	44234.
MAX KW	37.2	0.0	65.3	0.0	26.4	1.1	36.7	12.1	0.0	0.0	0.0	4.8	113.3
DAY/HR	18/10	0/ 0	2/21	0/ 0	4/17	4/15	29/15	9/ 8	0/ 0	0/ 0	0/ 0	1/19	4/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	13.9	0.3	6.5	6.6	0.0	0.0	0.0	4.8	
PEAK PCT	14.0	0.0	57.6	0.0	12.3	0.3	5.7	5.8	0.0	0.0	0.0	4.2	
NOV													
KWH	10197.	0.	22867.	0.	320.	6.	5639.	3139.	0.	0.	0.	1558.	43726.
MAX KW	37.4	0.0	65.3	0.0	20.3	0.8	34.3	8.0	0.0	0.0	0.0	4.8	114.2
DAY/HR	27/10	0/ 0	1/21	0/ 0	3/15	3/15	29/14	3/14	0/ 0	0/ 0	0/ 0	1/19	29/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	23.3	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	13.9	0.0	57.2	0.0	0.0	0.0	20.4	4.3	0.0	0.0	0.0	4.2	
DEC													
KWH	10598.	0.	23623.	0.	0.	0.	12351.	3158.	0.	0.	0.	1610.	51341.
MAX KW	37.6	0.0	65.3	0.0	0.0	0.0	52.6	5.3	0.0	0.0	0.0	4.8	123.8
DAY/HR	11/10	0/ 0	1/21	0/ 0	0/ 0	0/ 0	20/14	13/14	0/ 0	0/ 0	0/ 0	1/19	21/21
PEAK ENDUSE	15.9	0.0	65.3	0.0	0.0	0.0	33.0	5.0	0.0	0.0	0.0	4.8	
PEAK PCT	12.8	0.0	52.7	0.0	0.0	0.0	26.6	4.0	0.0	0.0	0.0	3.8	
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
MAX KW	37.7	0.0	65.3	0.0	57.5	7.0	74.6	21.6	0.0	0.0	0.0	4.8	145.7
MON/DY	1/10	0/ 0	1/ 3	0/ 0	6/29	6/28	1/14	1/14	0/ 0	0/ 0	0/ 0	1/ 1	1/14
PEAK ENDUSE	8.5	0.0	65.0	0.0	0.0	0.0	63.0	4.3	0.0	0.0	0.0	4.8	
PEAK PCT	5.9	0.0	44.6	0.0	0.0	0.0	43.3	3.0	0.0	0.0	0.0	3.3	

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for ELEV WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
KWH	0.	0.	275.	0.	0.	0.	0.	0.	0.	0.	0.	0.	275.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
KWH	0.	0.	262.	0.	0.	0.	0.	0.	0.	0.	0.	0.	262.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
KWH	0.	0.	315.	0.	0.	0.	0.	0.	0.	0.	0.	0.	315.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
KWH	0.	0.	302.	0.	0.	0.	0.	0.	0.	0.	0.	0.	302.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
KWH	0.	0.	302.	0.	0.	0.	0.	0.	0.	0.	0.	0.	302.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	3/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
KWH	0.	0.	315.	0.	0.	0.	0.	0.	0.	0.	0.	0.	315.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for ELEV WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
KWH	0.	0.	288.	0.	0.	0.	0.	0.	0.	0.	0.	0.	288.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	2/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
KWH	0.	0.	275.	0.	0.	0.	0.	0.	0.	0.	0.	0.	275.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
KWH	0.	0.	278.	0.	0.	0.	0.	0.	0.	0.	0.	0.	278.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
DAY/HR	0/ 0	0/ 0	1/ 9	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 9
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
KWH	0.	0.	3443.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3443.
MAX KW	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
MON/DY	0/ 0	0/ 0	1/ 3	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/ 3
PEAK ENDUSE	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

YEARLY TRANSFORMER LOSSES = 0.0 KWH

REPORT- PS-F Energy End-Use Summary for FM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for FM1 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX THERM/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM1 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	347.	0.	0.	0.	0.	0.	0.	0.	0.	347.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	14/24	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	14/24
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	309.	0.	0.	0.	0.	0.	0.	0.	0.	309.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 5
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	211.	0.	0.	0.	0.	0.	0.	0.	0.	211.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	4/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	4/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.	0.	0.	90.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	11/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	46.	0.	0.	0.	0.	0.	0.	0.	0.	46.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	0.	0.	15.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.	0.	0.	15.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	24/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	24/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	17.	0.	0.	0.	0.	0.	0.	0.	0.	17.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	28/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	28/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM1 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	27.	0.	0.	0.	0.	0.	0.	0.	0.	27.
MAX MBTU/HR	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
DAY/HR	0/ 0	0/ 0	0/ 0	11/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	11/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	52.	0.	0.	0.	0.	0.	0.	0.	0.	52.
MAX MBTU/HR	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	122.	0.	0.	0.	0.	0.	0.	0.	0.	122.
MAX MBTU/HR	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	244.	0.	0.	0.	0.	0.	0.	0.	0.	244.
MAX MBTU/HR	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
DAY/HR	0/ 0	0/ 0	0/ 0	22/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	22/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	1494.	0.	0.	0.	0.	0.	0.	0.	0.	1494.
MAX MBTU/HR	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
MON/DY	0/ 0	0/ 0	0/ 0	1/14	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for DHW M WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	0.	11.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	9.	0.	9.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	

PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/14	0/ 0	3/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	

REPORT- PS-F Energy End-Use Summary for DHW M WEATHER FILE- ROCHESTER, NY (CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.	6.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	0.	7.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	2/14	0/ 0	2/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	8.	0.	8.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
DAY/HR	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/14	0/ 0	1/14
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	100.	0.	100.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
MON/DY	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 1	0/ 0	3/ 1
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	
PEAK PCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM2 WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
JAN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	30/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	30/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FEB													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 7	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 7
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	31/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	31/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
APR													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	12/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	12/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MAY													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	3/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	3/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUN													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	14/ 6	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	14/ 6
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
JUL													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	30/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	30/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
AUG													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	13/ 5	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	13/ 5
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- PS-F Energy End-Use Summary for HWM2 WEATHER FILE- ROCHESTER, NY
(CONTINUED)

SEP													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	21/ 2	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	21/ 2
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
OCT													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NOV													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	29/ 4	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	29/ 4
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DEC													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DAY/HR	0/ 0	0/ 0	0/ 0	20/ 7	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	20/ 7
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	=======	========
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MAX MBTU/HR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MON/DY	0/ 0	0/ 0	0/ 0	1/30	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	0/ 0	1/30
PEAK ENDUSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PEAK PCT	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

REPORT- BEPS Building Energy Performance WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1 ELECTRICITY													
MBTU	413.6	0.0	949.9	0.0	141.6	4.5	341.2	154.2	0.0	0.0	0.0	64.7	2069.7
FM1 NATURAL-GAS													
MBTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HWM1 STEAM													
MBTU	0.0	0.0	0.0	1494.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1494.4
DHW STEAM													
MBTU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.2	0.0	100.2
HWM2 STEAM													
MBTU	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
MBTU	413.6	0.0	949.9	1494.6	141.6	4.5	341.2	154.2	0.0	0.0	100.2	64.7	3664.5

TOTAL SITE ENERGY 3664.55 MBTU 105.7 KBTU/SQFT-YR GROSS-AREA 105.7 KBTU/SQFT-YR NET-AREA
TOTAL SOURCE ENERGY 8867.16 MBTU 255.8 KBTU/SQFT-YR GROSS-AREA 255.8 KBTU/SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 0.0
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

REPORT- BEPU Building Utility Performance WEATHER FILE- ROCHESTER, NY

	LIGHTS	TASK LIGHTS	MISC EQUIP	SPACE HEATING	SPACE COOLING	HEAT REJECT	PUMPS & AUX	VENT FANS	REFRIG DISPLAY	HT PUMP SUPPLEM	DOMEST HOT WTR	EXT USAGE	TOTAL
EM1 ELECTRICITY													
KWH	121177.	0.	278317.	0.	41474.	1332.	99976.	45182.	0.	0.	0.	18958.	606415.
FM1 NATURAL-GAS													
THERM	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
HWM1 STEAM													
MBTU	0.	0.	0.	1494.	0.	0.	0.	0.	0.	0.	0.	0.	1494.
DHW STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	100.	0.	100.
HWM2 STEAM													
MBTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TOTAL ELECTRICITY	606415. KWH	17.494 KWH	/SQFT-YR GROSS-AREA	17.494 KWH /SQFT-YR NET-AREA
TOTAL STEAM	1595. MBTU	0.046 MBTU	/SQFT-YR GROSS-AREA	0.046 MBTU /SQFT-YR NET-AREA

PERCENT OF HOURS ANY SYSTEM ZONE OUTSIDE OF THROTTLING RANGE = 0.0
PERCENT OF HOURS ANY PLANT LOAD NOT SATISFIED = 0.0

NOTE: ENERGY IS APPORTIONED HOURLY TO ALL END-USE CATEGORIES.

REPORT- ES-D Energy Cost Summary WEATHER FILE- ROCHESTER, NY

	METERED ENERGY	TOTAL CHARGE	VIRTUAL RATE	RATE USED

UTILITY-RATE	RESOURCE	METERS	UNITS/YR	($)	($/UNIT)	ALL YEAR?
ELEC-TARIFF	ELECTRICITY	EM1	606415. KWH	65056.	0.1073	YES
Hot Water Rate	STEAM	HWM1 DHW HWM2	1595. MBTU	23126.	14.5000	YES
				==========		
				88182.		

ENERGY COST/GROSS BLDG AREA: 2.54
ENERGY COST/NET BLDG AREA: 2.54

REPORT- ES-E Summary of Utility-Rate: ELEC-TARIFF WEATHER FILE- ROCHESTER, NY

RESOURCE: ELECTRICITY DEMAND-INTERVAL 30 3413. BTU/KWH
BILLING-DAY: 31 RATE-LIMITATION: 0.0000
METERS: EM1
POWER-FACTOR: 0.80 EXCESS-KVAR-FRAC: 0.75 EXCESS-KVAR-CHG: 0.0000

RATE-QUALIFICATIONS
MIN-ENERGY: 0.0
MAX-ENERGY: 0.0
MIN-DEMAND: 0.0
MAX-DEMAND: 0.0
QUALIFY-RATE: ALL YEAR
USE-MIN-QUAL: NO

BLOCK-CHARGES

DEMAND-RATCHETS

MIN-MON-RATCHETS

MONTH	METERED ENERGY KWH	BILLING ENERGY KWH	METERED DEMAND KW	BILLING DEMAND KW	ENERGY CHARGE ($)	DEMAND CHARGE ($)	ENERGY CST ADJ ($)	TAXES ($)	SURCHRG ($)	FIXED CHARGE ($)	MINIMUM CHARGE ($)	VIRTUAL RATE ($/UNIT)	TOTAL CHARGE ($)
JAN	59819	59819	145.9	145.9	5060	1159	0	0	0	0	700	0.1040	6218
FEB	53760	53760	133.3	133.3	4534	1058	0	0	0	0	700	0.1040	5592
MAR	51980	51980	122.4	122.4	4474	972	0	0	0	0	700	0.1048	5445
APR	46262	46262	123.9	123.9	4045	984	0	0	0	0	700	0.1087	5029
MAY	46657	46657	122.7	122.7	4131	974	0	0	0	0	700	0.1094	5105
JUN	51218	51218	141.8	141.8	4538	1126	0	0	0	0	700	0.1106	5664
JUL	55893	55893	141.6	141.6	4938	1125	0	0	0	0	700	0.1085	6063
AUG	54124	54124	127.5	127.5	4783	1012	0	0	0	0	700	0.1071	5796
SEP	47401	47401	135.2	135.2	4170	1073	0	0	0	0	700	0.1106	5243

OCT	44234	44234	113.3	113.3	3902	900	0	0	0	0	700	0.1085	4801
NOV	43726	43726	114.2	114.2	3813	907	0	0	0	0	700	0.1079	4719
DEC	51341	51341	123.9	123.9	4396	984	0	0	0	0	700	0.1048	5379
TOTAL	606415	606415	145.9		52783	12273	0	0	0	0		0.1073	65056

REPORT- ES-E Summary of Utility-Rate: Hot Water Rate WEATHER FILE- ROCHESTER, NY

RESOURCE: STEAM DEMAND-INTERVAL 60 1000000. BTU/MBTU
BILLING-DAY: 31 RATE-LIMITATION: 0.0000
METERS: HWM1 DHW HWM2

RATE-QUALIFICATIONS		BLOCK-CHARGES	DEMAND-RATCHETS	MIN-MON-RATCHETS
MIN-ENERGY:	0.0			
MAX-ENERGY:	0.0			
MIN-DEMAND:	0.0			
MAX-DEMAND:	0.0			
QUALIFY-RATE:	ALL YEAR			
USE-MIN-QUAL:	NO			

MONTH	METERED ENERGY MBTU	BILLING ENERGY MBTU	METERED DEMAND MBTU/HR	BILLING DEMAND MBTU/HR	ENERGY CHARGE ($)	DEMAND CHARGE ($)	ENERGY CST ADJ ($)	TAXES ($)	SURCHRG ($)	FIXED CHARGE ($)	MINIMUM CHARGE ($)	VIRTUAL RATE ($/UNIT)	TOTAL CHARGE ($)
JAN	356	356	1.2	1.2	5165	0	0	0	0	0	0	14.5000	5165
FEB	318	318	1.2	1.2	4617	0	0	0	0	0	0	14.5000	4617
MAR	222	222	0.9	0.9	3215	0	0	0	0	0	0	14.5000	3215
APR	100	100	0.4	0.4	1443	0	0	0	0	0	0	14.5000	1443
MAY	55	55	0.3	0.3	802	0	0	0	0	0	0	14.5000	802
JUN	24	24	0.3	0.3	342	0	0	0	0	0	0	14.5000	342
JUL	22	22	0.3	0.3	312	0	0	0	0	0	0	14.5000	312
AUG	24	24	0.3	0.3	349	0	0	0	0	0	0	14.5000	349
SEP	33	33	0.3	0.3	481	0	0	0	0	0	0	14.5000	481

OCT	59	59	0.4	0.4	858	0	0	0	0	0	0	14.5000	858
NOV	130	130	0.6	0.6	1879	0	0	0	0	0	0	14.5000	1879
DEC	252	252	0.9	0.9	3661	0	0	0	0	0	0	14.5000	3661
TOTAL	1595	1595	1.2		23126	0	0	0	0	0		14.5000	23126

Appendix C LEED-NC Attempted Credits: Intent and Requirements

Sustainable Design & The LEED Rating System

LEED is the nationally accepted benchmark for the design, construction and operation of high performance green buildings.

LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance.

LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health:

- sustainable site development
- water savings
- energy efficiency
- materials selection
- indoor environmental quality

The LEED Rating System

sustainable sites

Possible Credits Overview:

- SSp1: Construction Activity Pollution Prevention
- SSc1: Site Selection
- SSc2: Development Density & Community Connectivity
- SSc3: Brownfield Redevelopment
- SSc4: Alternative Transportation
- SSc5: Site Development
- SSc6: Storm Water Management
- SSc7: Heat Island Effect
- SSc8: Light Pollution Reduction

Site Selection Prerequisite 1:

Construction Activity Pollution Prevention

Intent:

Reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.

Site Selection Prerequisite 1:

Construction Activity Pollution Prevention

Requirements:

Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities. The ESC Plan shall conform to the requirements of the 2003 EPA Construction General Permit OR local control standards and codes, whichever is more stringent. The Plan shall describe the measures implemented to accomplish the following objectives:

- Prevent loss of soil during construction by storm water runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- Prevent sedimentation of storm sewer or receiving streams.
- Prevent polluting the air with dust and particulate matter.

Site Selection Prerequisite 1:

Construction Activity Pollution Prevention

Stabilization Methods:
- Temporary seeding
- Permanent seeding
- Mulching

Structural Control:
- Silt fence
- Earth dike
- Sediment basin
- Sediment trap

Site Selection Credit 1:

Site Selection

Intent:

Avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site.

Site Selection Credit 1:

Site Selection

Requirements:

Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria:

- Prime farmland as defined by the United States Department of Agriculture
- Previously undeveloped land whose elevation is lower than 5 feet above the elevation of the 100-year flood as defined by FEMA
- Land identified as habitat for species on Federal or State threatened or endangered lists

Site Selection Credit 1:

Site Selection

Requirements:

Within 100 feet of any wetlands, and isolated wetlands or areas of special concern identified by state or local rule, OR within setback distances from wetlands prescribed in state or local regulations, as defined by local or state rule or law, whichever is more stringent

• Previously undeveloped land that is within 50 feet of a water body, defined as seas, lakes, rivers, streams and tributaries which support or could support fish, recreation or industrial use, consistent with the terminology of the Clean Water Act

• Land which prior to acquisition for the project was public parkland, unless land of equal or greater value as parkland is accepted in trade by the public landowner (Park Authority projects are exempt)

Site Selection Credit 2:

Development Density & Community Connectivity

Intent:

Channel development to urban areas with existing infrastructure, protect greenfields, and preserve habitat and natural resources.

Site Selection Credit 2:

Development Density & Community Connectivity

Requirements:

OPTION 1 — DEVELOPMENT DENSITY
Construct or renovate building on a previously developed site AND in a community with a minimum density of 60,000 square feet per acre net (Note: density calculation must include the area of the project being built and is based on a typical two-story downtown development).

OR

OPTION 2 — COMMUNITY CONNECTIVITY
Construct or renovate building on a previously developed site AND within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net AND within 1/2 mile of at least 10 Basic Services AND with pedestrian access between the building and the services.

Site Selection Credit 4.2:

Alternative Transportation – Bicycle Storage & Changing Rooms

Intent:

Reduce pollution and land development impacts from automobile use.

Site Selection Credit 4.2:

Alternative Transportation – Bicycle Storage & Changing Rooms

Requirements :

For commercial or institutional buildings, provide secure bicycle racks and/or storage (within 200 yards of a building entrance) for 5% or more of all building users (measured at peak periods), AND, provide shower and changing facilities in the building, or within 200 yards of a building entrance, for 0.5% of Full-Time Equivalent (FTE) occupants.

OR

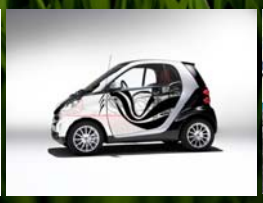
For residential buildings, provide covered storage facilities for securing bicycles for 15% or more of building occupants in lieu of changing/shower facilities.

Site Selection Credit 4.3:

Alternative Transportation – Low Emissions & Fuel Efficient Vehicles

Intent:

Reduce pollution and land development impacts from automobile use.


Site Selection Credit 4.3:

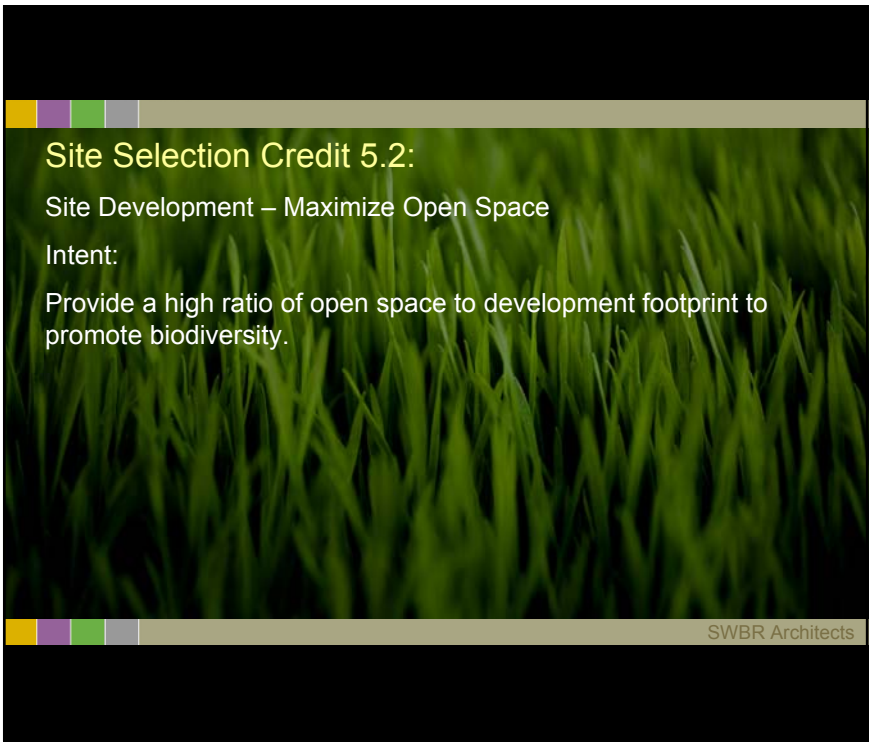
Alternative Transportation – Low Emissions & Fuel Efficient Vehicles

Requirements:

OPTION 1
Provide low-emitting and fuel-efficient vehicles for 3% of Full-Time Equivalent (FTE) occupants AND provide preferred parking for these vehicles.

OPTION 2
Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site.

OPTION 3
Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site (liquid or gaseous fueling facilities must be separately ventilated or located outdoors).



Site Selection Credit 5.2:

Site Development – Maximize Open Space

Intent:

Provide a high ratio of open space to development footprint to promote biodiversity.

Site Selection Credit 5.2:

Site Development – Maximize Open Space

Requirements:

OPTION 1
Reduce the development footprint (defined as the total area of the building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%.

OPTION 2
For areas with no local zoning requirements (e.g., some university campuses, military bases), provide vegetated open space area adjacent to the building that is equal to the building footprint.

OPTION 3
Where a zoning ordinance exists, but there is no requirement for open space (zero), provide vegetated open space equal to 20% of the project's site area.

Site Selection Credit 6.1:

Storm Water Management – Quantity Control

Intent:

Limit Disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration and managing stormwater runoff.



Site Selection Credit 6.1:

Storm Water Management – Quantity Control

Requirements:

CASE 1 — Existing Imperviousness is less than or equal to 50%
Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the predevelopment peak discharge rate and quantity for the one- and two-year 24-hour design storms.
OR
Implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies.

CASE 2 — Existing Imperviousness is greater than **50%**
Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the two-year 24-hour design storm

Site Selection Credit 6.2:

Storm Water Management – Quality Control

Intent:

Reduce or eliminate water pollution by reducing impervious cover, increasing on-site infiltration, eliminating sources of contaminants, and removing pollutants from stormwater runoff.

Site Selection Credit 6.2:

Storm Water Management – Quality Control

Requirements:

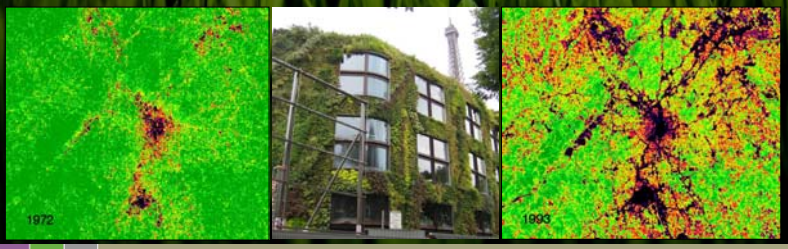
Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs).

Site Selection Credit 7.1:

Heat Island Effect – Non-Roof

Intent:

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate, human and wildlife habitat.



Site Selection Credit 7.1:

Heat Island Effect – Non-Roof

Requirements:

OPTION 1
Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots):
• Shade (within 5 years of occupancy)
• Paving materials with a Solar Reflectance Index (SRI) of at least 29
OR
Open grid pavement system
OPTION 2
Place a minimum of 50% of parking spaces under cover (defined as under ground, under deck, under roof, or under a building). Any roof used to shade or covered parking must have an SRI of at least 29.

Site Selection Credit 7.2:

Heat Island Effect –Roof

Intent:

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate, human and wildlife habitat.

Site Selection Credit 7.2:

Heat Island Effect –Roof

Requirements:

OPTION 1
Use roofing materials having a Solar Reflectance Index (SRI) equal to or greater than the values in the table for a minimum of 75% of the roof surface.

OPTION 2
Install a vegetated roof for at least 50% of the roof area.

OPTION 3
Install high albedo and vegetated roof surfaces that, in combination, meet the following criteria: (Area of SRI Roof / 0.75) + (Area of vegetated roof / 0.5) >= Total Roof Area


water efficiency
SWBR Architects


Possible Credits Overview:
WE Credit 1.1 Water Efficient Landscaping:
WE Credit 1.2 Water Efficient Landscaping:
WE Credit 2 Innovative Wastewater
WE Credit 3.1 Water Use Reduction: 20%
WE Credit 3.2 Water Use Reduction: 30%
SWBR Architects

Water Efficiency Credit 1.1:

Water Efficient Landscaping – Reduce by 50%

Intent:

Limit or eliminate the use of potable water, or other natural surface or subsurface water resources available on or near the project site, for landscape irrigation.

Requirements:

Reduce potable water consumption for irrigation by 50% from a calculated mid-summer baseline case.

Water Efficiency Credit 1.2:

Water Efficient Landscaping – No Potable Use or No Irrigation

Requirements: Achieve WE Credit 1.1.

AND

Use only captured rainwater, recycled wastewater, recycled greywater, or water treated and conveyed by a public agency specifically for non-potable uses for irrigation.

OR

Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within one year of installation.

Water Efficiency Credit 2

Innovative Wastewater Technologies

Intent:
Reduce generation of wastewater and potable water demand, while increasing the local aquifer recharge.

Requirements:

OPTION 1
Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures (water closets, urinals) or non-potable water (captured rainwater, recycled greywater, and on-site or municipally treated wastewater).

OPTION 2
Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.

Water Efficiency Credit 2

Innovative Wastewater Technologies

Potential Technologies & Strategies:

Specify High Efficiency Fixtures and dry fixtures such as composting toilets and non-water urinals to reduce wastewater volumes.

Consider reusing stormwater or greywater for sewage conveyance or on-site wastewater treatment systems.

Water Efficiency Credit 3.1

Water Use Reduction

20% Reduction

Intent:
Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Requirements:
Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures (as applicable to the building): water closets, urinals, lavatory faucets, showers and kitchen sinks.

Water Efficiency Credit 3.2

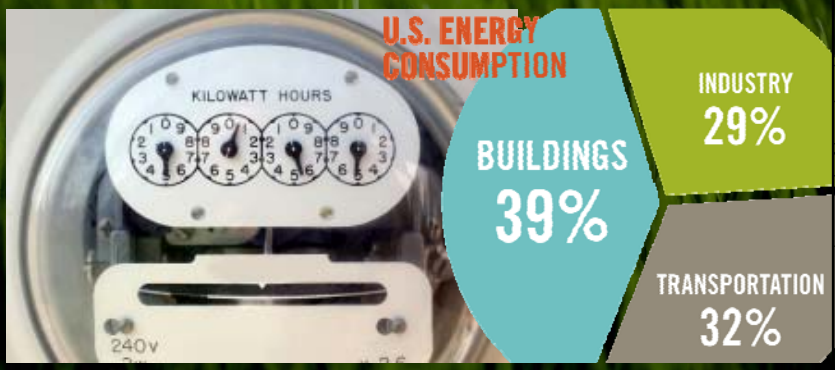
Water Use Reduction

30% Reduction

Intent:
Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Requirements:
Employ strategies that in aggregate use 30% less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements. Calculations are based on estimated occupant usage and shall include only the following fixtures (as applicable to the building): water closets, urinals, lavatory faucets, showers and kitchen sinks.

Energy and Atmosphere



The United States has only 5% of the world's population
but contributes a quarter of the total global primary energy demand.

Possible Credits Overview:

EA Prerequisite 1	Fundamental Commissioning of the Building Energy Systems
EA Prerequisite 2	Minimum Energy Performance
EA Prerequisite 3	Fundamental Refrigerant Management
EA Credit 1	Optimize Energy Performance
EA Credit 2	On-Site Renewable Energy
EA Credit 3	Enhanced Commissioning
EA Credit 4	Enhanced Refrigerant Management
EA Credit 5	Measurement & Verification
EA Credit 6	Green Power

Energy and Atmosphere Prerequisite 1

Fundamental Commissioning of the Building Energy Systems

Intent:
Verify that the building's energy related systems are installed, calibrated and perform according to the owner's project requirements, basis of design, and construction documents.

Requirements:
The following commissioning process activities shall be completed by the commissioning team, in accordance with the LEED-NC 2.2 Reference Guide:

Energy and Atmosphere Prerequisite 1

Fundamental Commissioning of the Building Energy Systems

1) Designate an individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities.
   a) The CxA shall have documented commissioning authority experience in at least two building projects.
   b) The individual serving as the CxA shall be independent of the project's design and construction management, though they may be employees of the firms providing those services. The CxA may be a qualified employee or consultant of the Owner.
   c) The CxA shall report results, findings and recommendations directly to the Owner.
   d) For projects smaller than 50,000 gross square feet, the CxA may include qualified persons on the design or construction teams who have the required experience.

Energy and Atmosphere Prerequisite 1

Fundamental Commissioning of the Building Energy Systems

2) The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents.

3) Develop and incorporate commissioning requirements into the construction documents.

4) Develop and implement a commissioning plan.

5) Verify the installation and performance of the systems to be commissioned.

6) Complete a summary commissioning report.

Energy and Atmosphere Prerequisite 2

Minimum Energy Performance

Intent: Establish the minimum level of energy efficiency for the proposed building and systems.

Requirements: Design the building project to comply with both —

• the mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4) of ASHRAE/IESNA Standard 90.1-2004 (without amendments); and

• the prescriptive requirements (Sections 5.5, 6.5, 7.5 and 9.5) or performance requirements (Section 11) of ASHRAE/IESNA Standard 90.1-2004 (without amendments).

Energy and Atmosphere Prerequisite 3

Fundamental Refrigerant Management

Intent:
Reduce ozone depletion.

Requirements:
Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phase-out conversion prior to project completion. Phase-out plans extending beyond the project completion date will be considered on their merits.

Energy and Atmosphere Credit 1

Optimize Energy Performance

Intent:
Achieve increasing levels of energy performance above the baseline in the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Requirements:
Select one of the three compliance path options described below. Project teams documenting achievement using any of the three options are assumed to be in compliance with EA Prerequisite 2.

Energy and Atmosphere Credit 1

Potential Technologies and Strategies:
Design the building envelope and systems to maximize energy performance. Use a computer simulation model to assess the energy performance and identify the most cost-effective energy efficiency measures. Quantify energy performance as compared to a baseline building.

If a local code has demonstrated quantitative and textual equivalence following, at a minimum, the U.S. Department of Energy standard process for commercial energy code determination, then the results of that analysis may be used to correlate local code performance with ASHRAE 90.1-2004. Details on the DOE process for commercial energy code determination can be found at www.energycodes.gov/implement/determinations_com.stm.

OPTION 1 — WHOLE BUILDING ENERGY SIMULATION (1–10 Points)

Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2004 (without amendments) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.

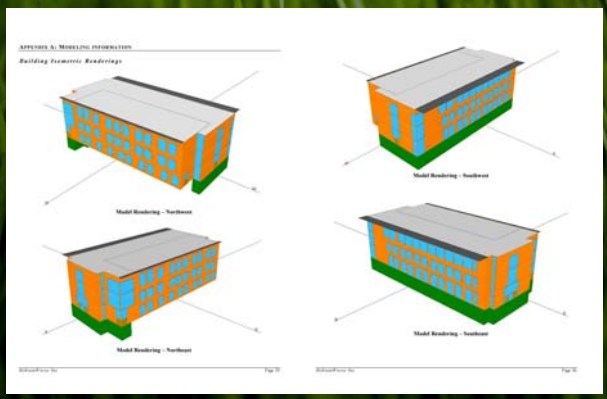
The minimum energy cost savings percentage for each point threshold is as follows:

OPTION 1 — WHOLE BUILDING ENERGY SIMULATION (1–10 Points)

Two (2) points *mandatory* for all LEED-NC projects registered after June 26, 2007

New Buildings	Existing Building Renovations	Points
10.5%	3.5%	1
14%	7%	2
17.5%	10.5%	3
21%	14%	4
24.5%	17.5%	5
28%	21%	6
31.5%	24.5%	7
35%	28%	8
38.5%	31.5%	9
42%	35%	10

OPTION 1 — WHOLE BUILDING ENERGY SIMULATION (1–10 Points)



OPTION 1 — WHOLE BUILDING ENERGY SIMULATION (1–10 Points)

Table 1: NYSERDA NCP Energy Savings Summary Table

EEM No.	Description (1)	Energy impact of each EEM (3)						Annual Operating Cost (4)	Operating Cost Savings	Percent Cost Savings	Estimated Incre- mental Cost	Simple Payback Period (Years)	NYSERDA Incentive (5)(6)	Customer Effective Payback (Years)
		Regulated Energy Use (kWh)	Regulated EEM Savings (kWh)	Summer Electric Demand (kW)	EEM Savings (kW)	Winter Electric Demand (kW)	EEM Savings (kW)							
	ECCCNY Code Compliant (2)	688,006	---	174.8	---	137.3	---	$107,767	---	---	---	---	---	---
	Whole Building Design	**405,240**	**282,766**	**103.5**	**71.3**	**95.5**	**41.8**	**$82,514**	**$25,253**	**23.4%**	**$157,478**	**6.2**	**$110,235**	**1.9**
1	VAV System	452,309	47,069	115.5	12.0	104.8	9.3	$85,960	$5,446	13.6%	$5,800	1.7	$2,354	-
2	Fume Hood Occupancy Sensors	407,392	2,152	103.1	-0.4	95.2	-0.3	$82,710	$196	0.8%	$7,050	36.0	BC<1	-
4	High Eff. Lighting and Occupancy Sensor Control	438,743	33,503	114.4	10.9	104.0	8.5	$85,469	$2,955	11.7%	$40,400	13.7	BC<1	-
5	Building Automation System	429,107	23,867	103.3	-0.2	95.1	-0.4	$87,988	$5,474	21.7%	$5,700	1.0	BC<1	-
6	Central Chiller	407,807	2,567	126.4	22.9	95.5	0.0	$83,423	$909	3.6%	$27,600	30.4	$19,320	-
7	Daylighting and lighting Control	420,282	15,042	111.4	7.9	99.3	3.8	$84,024	$1,510	6.0%	$14,700	9.8	$10,353	-
8	Solar Shading	407,018	1,778	113.9	10.4	97.0	1.5	$82,573	$57	0.2%	$1,950	34.2	$1,365	-
9	White Roof	406,087	847	105.4	1.9	95.6	0.1	$82,531	$17	0.1%	$4,250	250.0	BC<1	-
11	CO2 Demand Control Ventilation	411,643	6,403	104.7	1.2	95.9	0.4	$82,622	$308	1.2%	$9,900	32.1	BC<1	-
12	Roof Insulation Improvements	400,490	-4,750	103.8	0.3	94.8	-0.7	$82,551	$37	0.1%	$9,348	252.6	BC<1	-
13	Wall Insulation Improvements	400,694	-4,546	105.4	1.9	94.4	-1.1	$83,690	$1,376	5.4%	$1,815	1.3	BC<1	-
14	Glazing Improvements	411,146	5,906	109.8	6.3	97.1	1.6	$85,067	$2,553	10.1%	$28,875	11.3	BC<1	-

Energy and Atmosphere Credit 3

Enhanced Commissioning

Intent

Begin the commissioning process early during the design process and execute additional activities after systems performance verification is completed.

Requirements

Implement, or have a contract in place to implement, the following additional commissioning process activities in addition to the requirements of EA Prerequisite 1 and in accordance with the LEED for New Construction 2.2 Reference Guide:

Energy and Atmosphere Credit 3

Enhanced Commissioning

1. Prior to the start of the construction documents phase, designate an independent Commissioning Authority (CxA) to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3 and 6. Other team members may perform Tasks 4 and 5.
   a. The CxA shall have documented commissioning authority experience **in at least two building projects**.
   b. The individual serving as the CxA shall be—
      i. **independent** of the work of design and construction;
      ii. **not an employee of the design firm**, though they may be contracted through them;
      iii. **not an employee of**, or contracted through, **a contractor or construction manager** holding construction contracts; and
      iv. **(can be) a qualified employee or consultant of the Owner**.
   c. The CxA shall report results, findings and recommendations **directly to the Owner**.
   d. This requirement has no deviation for project size.

Energy and Atmosphere Credit 3

Enhanced Commissioning

2. The CxA shall conduct, at a minimum, one commissioning design review of the Owner's Project Requirements (OPR), Basis of Design (BOD), and design documents prior to mid-construction documents phase and back-check the review comments in the subsequent design submission.
3. The CxA shall review contractor submittals applicable to systems being commissioned for compliance with the OPRand BOD. This review shall be concurrent with A/E reviews and submitted to the design team and the Owner.
4. Develop a systems manual that provides future operating staff the information needed to understand and optimally operate the commissioned systems.
5. Verify that the requirements for training operating personnel and building occupants are completed.
6. Assure the involvement by the CxA in reviewing building operation within 10 months after substantial completion with O&M staff and occupants. Include a plan for resolution of outstanding commissioning related issues.

Energy and Atmosphere Credit 3

Enhanced Commissioning

Potential Technologies & Strategies

Although it is preferable that the CxA be contracted by the Owner, for the enhanced commissioning credit, the CxA may also be contracted through the design firms or construction management firms not holding construction contracts.

Energy and Atmosphere Credit 4

Enhanced Refrigerant Management

Intent

Reduce ozone depletion and support early compliance with the Montreal Protocol while minimizing direct contributions to global warming.

Requirements

OPTION 1
Do not use refrigerants.

OR

OPTION 2
Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. The base building HVAC&R equipment shall comply with the following formula, which sets a maximum threshold for the combined contributions to ozone depletion and global warming potential:

LCGWP + LCODP x 105 ≤ 100 (see Reference Guide for details)

Energy and Atmosphere Credit 4

Enhanced Refrigerant Management

Potential Technologies & Strategies:

Design and operate the facility without mechanical cooling and refrigeration equipment. Where mechanical cooling is used, utilize base building HVAC and refrigeration systems for the refrigeration cycle that minimize direct impact on ozone depletion and global warming. Select HVAC&R equipment with reduced refrigerant charge and increased equipment life. Maintain equipment to prevent leakage of refrigerant to the atmosphere.

Utilize fire suppression systems that do not contain HCFCs or Halons.

Overview

"Away went away"

- William McDonough

In 1969, with humanity's first view of the Earth as a single planet floating in space, the fallacy that we could throw things out became crystal clear.

Possible Credits Overview:

MRp1: Storage & Collection of Recyclables

MRc1: Building Reuse

MRc2: Construction Waste Management

MRc3: Resource Reuse

MRc4: Recycled Content

MRc5: Regional Materials

MRc6: Rapidly Renewable Materials

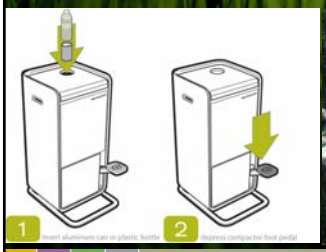
MRc7: Certified Wood

Materials and Resources Pre-Requisite 1:

Storage & Collection of Recyclables

Intent:

Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.



Materials and Resources Prerequisite 1:

Storage & Collection of Recyclables

Requirements:

Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.

Recycling Area Guidelines Commercial Buildings: Square Footage [SF]	Recycling Area (Min.) [SF]
0 to 5,000	82
5,001 to 15,000	125
15,001 to 50,000	175
50,001 - 100,000	225
100,001 - 200,000	275
200,001 or more	500

Materials and Resources Credit 2.1:

Construction Waste Management – Divert 50% from Disposal

Intent:

Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.



Materials and Resources Credit 2.1:

Construction Waste Management – Divert 50% from Disposal

Requirements:

Recycle and/or salvage at least 50% of non-hazardous construction and demolition. Develop and implement a **Construction Waste Management Plan** that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or comingled. Excavated soil and land-clearing debris does not contribute to this credit. Calculations can be done by **weight or volume**, but must be consistent throughout.

11/08/07	3.99 TONS WOOD - PO# WOOD
11/08/07	Haul Charge - 30 Yd Roll Off - PO# WOOD
11/29/07	3.85 TONS WOOD - PO# WOOD
11/29/07	Haul Charge - 30 Yd Roll Off - PO# WOOD
12/11/07 - 12/18/07	30 Yd Roll Off

Reused asphalt, concrete or masonry Track Waste Hauling receipts

Materials and Resources Credit 4.1:

Recycled Content – 10% (post consumer + 1/2 pre consumer)

Intent:

Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.



Materials and Resources Credit 4.1:

Recycled Content – 10% (post consumer + 1/2 pre consumer)

Requirements:

Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials **permanently installed** in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.

Materials and Resources Credit 4.2:

Recycled Content – 20% (post consumer + 1/2 pre consumer)

Intent:

Increase demand for building products that incorporate recycled content materials, thereby reducing the impacts resulting from extraction and processing of virgin materials.

Materials and Resources Credit 4.2:

Recycled Content – 20% (post consumer + 1/2 pre consumer)

Requirements:

Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional 10% beyond MR Credit 4.1 (total of 20%, based on cost) of the total value of the materials in the project. The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.

Materials and Resources Credit 5.1:

Regional Materials - 10% Extracted, Processed and Manufactured Regionally

Intent:

Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

Materials and Resources Credit 5.1:

Regional Materials - 10% Extracted, Processed and Manufactured Regionally

Requirements:

Use building materials or products that have been **extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site** for a minimum of 10% (based on cost) of the total materials value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.
Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.

Materials and Resources Credit 5.2:

Regional Materials - 20% Extracted, Processed and Manufactured Regionally

Requirements:

Use building materials or products that have been **extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site** for a minimum of 10% (based on cost) of the total materials value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.
Mechanical, electrical and plumbing components and specialty items such as elevators and equipment shall not be included in this calculation. Only include materials permanently installed in the project. Furniture may be included, providing it is included consistently in MR Credits 3–7.

Indoor Environmental Quality

Possible Credits Overview: 15 Possible Points

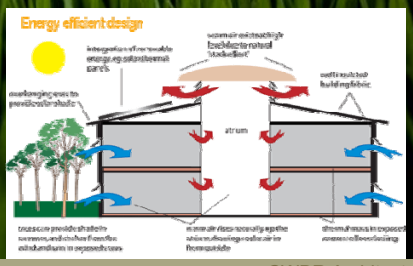
EQp1: Minimum IAQ Performance
EQp2: Environmental Tobacco Smoke (ETS) Control
EQc1: Outdoor Air Delivery Monitoring
EQc2: Increased Ventilation
EQc3: Construction IAQ Management Plan
EQc4: Low-Emitting Materials
EQc5: Indoor Chemical & Pollutant Source Control
EQc6: Controllability of Systems
EQc7: Thermal Comfort
EQc8: Daylight & Views

Indoor Environmental Quality Prerequisite 1

Minimum IAQ Performance

Intent:

Establish minimum **indoor air quality (IAQ)** performance to enhance indoor air quality in buildings, thus contributing to the comfort and well-being of the occupants.



Indoor Environmental Quality Prerequisite 1

Minimum IAQ Performance

Requirements:

Meet the minimum requirements of Sections 4 through 7 of **ASHRAE 62.1-2004**, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate Procedure or the applicable local code, whichever is more stringent.

Naturally ventilated buildings shall comply with ASHRAE 62.1-2004, paragraph 5.1.

SWBR Architects

Indoor Environmental Quality Prerequisite 2

Environmental Tobacco Smoke (ETS) Control

Intent:

Minimize exposure of building occupants, indoor surfaces, and ventilation air distribution systems to **Environmental Tobacco Smoke (ETS).**

Indoor Environmental Quality Prerequisite 2

Environmental Tobacco Smoke (ETS) Control

Requirements:

OPTION 1

• **Prohibit smoking** in the building.

• Locate any exterior designated smoking areas at least **25 feet away** from entries, outdoor air intakes and operable windows.

OR

Indoor Environmental Quality Prerequisite 2

Environmental Tobacco Smoke (ETS) Control

Requirements:

OPTION 2
• Prohibit smoking in the building except in designated smoking areas.
• Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows.
• Locate designated smoking rooms to effectively contain, capture and remove ETS from the building. At a minimum, the smoking room must be directly exhausted to the outdoors with no re-circulation of ETS-containing air to the non-smoking area of the building, and enclosed with impermeable deck-to-deck partitions.

OR

Indoor Environmental Quality Prerequisite 2

Environmental Tobacco Smoke (ETS) Control

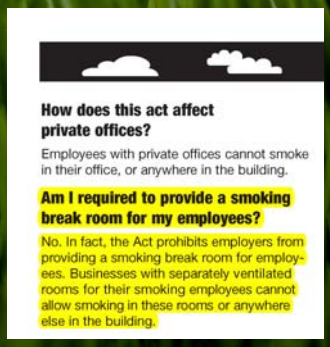
Requirements:

OPTION 3 (For residential buildings only)
• Prohibit smoking in all common areas of the building.
• Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows opening to common areas.
• Minimize uncontrolled pathways for ETS transfer between individual residential units by sealing penetrations in walls, ceilings and floors in the residential units, and by sealing vertical chases adjacent to the units.
• All doors in the residential units leading to common hallways shall be weather-stripped to minimize air leakage into the hallway.

Indoor Environmental Quality Prerequisite 2

Environmental Tobacco Smoke (ETS) Control

Why Option 1
Works Best For Us…



How does this act affect private offices?

Employees with private offices cannot smoke in their office, or anywhere in the building.

Am I required to provide a smoking break room for my employees?

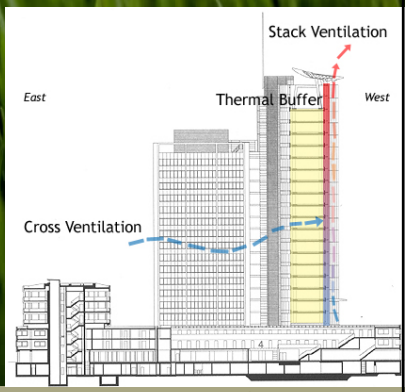
No. In fact, the Act prohibits employers from providing a smoking break room for employees. Businesses with separately ventilated rooms for their smoking employees cannot allow smoking in these rooms or anywhere else in the building.

Indoor Environmental Quality Credit 1

Outdoor Air Delivery Monitoring

Intent:

Provide capacity for ventilation system monitoring to help sustain occupant comfort and well-being.



Indoor Environmental Quality Credit 1

Outdoor Air Delivery Monitoring

Requirements:

Install **permanent monitoring systems** that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to **generate an alarm** when the conditions vary by **10% or more** from setpoint, via either a building automation system alarm to the building operator or via a visual or audible alert to the building occupants.

Indoor Environmental Quality Credit 1

Outdoor Air Delivery Monitoring

Requirements (cont.):

FOR MECHANICALLY VENTILATED SPACES

• **Monitor carbon dioxide concentrations** within all densely occupied spaces (those with a design occupant density greater than or equal to 25 people per 1000 sq.ft.). CO2 monitoring locations shall be between **3 feet and 6 feet above the floor**.

• For each mechanical ventilation system serving non-densely occupied spaces, provide a direct outdoor airflow measurement device capable of measuring the minimum outdoor airflow rate with an accuracy of plus or minus 15% of the design minimum outdoor air rate, as defined by **ASHRAE 62.1-2004.**

Indoor Environmental Quality Credit 1

Outdoor Air Delivery Monitoring

Requirements (cont.):

FOR NATURALLY VENTILATED SPACES

• Monitor CO_2 concentrations within all naturally ventilated spaces. CO_2 monitoring shall be located within the room between 3 feet and 6 feet above the floor. One CO_2 sensor may be used to represent multiple spaces if the natural ventilation design uses passive stack(s) or other means to induce airflow through those spaces equally and simultaneously without intervention by building occupants.

Indoor Environmental Quality Credit 2

Increased Ventilation

Intent:

Provide additional outdoor air ventilation to improve indoor air quality for improved occupant comfort, well-being and productivity.

Indoor Environmental Quality Credit 2

Increased Ventilation

Requirements:

FOR MECHANICALLY VENTILATED SPACES

• Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least **30% above the minimum rates** required by **ASHRAE Standard 62.1-2004** as determined by EQ Prerequisite 1.

Indoor Environmental Quality Credit 2

Increased Ventilation

Requirements:

FOR NATURALLY VENTILATED SPACES

• Design natural ventilation systems for occupied spaces to meet the recommendations set forth in the Carbon Trust "Good Practice Guide 237" [1998]. Determine that natural ventilation is an effective strategy for the project by following the flow diagram process shown in Figure 1.18 of the Chartered Institution of Building Services Engineers (CIBSE) Applications Manual 10: 2005, Natural ventilation in non-domestic buildings.

AND

Indoor Environmental Quality Credit 2

Increased Ventilation

Requirements:

FOR NATURALLY VENTILATED SPACES (cont'd.)

• Use diagrams and calculations to show that the design of the natural ventilation systems meets the recommendations set forth in the **CIBSE** Applications Manual, Natural ventilation in non-domestic buildings.

OR

• Use a macroscopic, multi-zone, analytic model to predict that room-by-room airflows will effectively naturally ventilate, defined as providing the minimum ventilation rates required by **ASHRAE 62.1-2004** Chapter 6, for at least **90% of occupied spaces**.

Indoor Environmental Quality Credit 3.1

Construction IAQ Management Plan: During Construction

Intent:

Reduce indoor air quality problems resulting from the construction/ renovation process in order to help sustain the comfort and well-being of construction workers and building occupants.

Indoor Environmental Quality Credit 3.1

Construction IAQ Management Plan: During Construction

Requirements:

Develop and implement an **Indoor Air Quality (IAQ) Management Plan** for the construction and pre-occupancy phases of the building as follows:

• During construction meet or exceed the recommended Control Measures of the **Sheet Metal and Air Conditioning National Contractors Association (SMACNA)** IAQ Guidelines for Occupied Buildings under Construction, 1995, Chapter 3.

Indoor Environmental Quality Credit 3.1

Construction IAQ Management Plan: During Construction

Requirements: (cont'd)

• Protect stored on-site or installed absorptive materials from moisture damage.

If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (**MERV**) of 8 shall be used at each return air grille, as determined by **ASHRAE 52.2-1999**.

Replace all filtration media immediately prior to occupancy.

Indoor Environmental Quality Credit 4.1

Low-Emitting Materials: Adhesives & Sealants

Intent:

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Indoor Environmental Quality Credit 4.1

Low-Emitting Materials: Adhesives & Sealants

Requirements:

All adhesives and sealants used on the **interior** of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards:

•Adhesives, Sealants and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits are listed in the table below and correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.

•Aerosol Adhesives: Green Seal Standard for Commercial Adhesives GS-36 requirements in effect on October 19, 2000.

Indoor Environmental Quality Credit 4.2

Low-Emitting Materials: Paints and Coatings

Intent:

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Indoor Environmental Quality Credit 4.2

Low-Emitting Materials: Paints and Coatings

Requirements:

Paints and coatings used on the building interior (defined as inside of the weatherproofing system and applied on-site) shall comply with the following:

• Architectural paints, coatings and primers applied to interior walls and ceilings: Do not exceed the VOC content limits established in Green Seal Standard GS-11, Paints.

• Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates: Do not exceed the VOC content limit of 250 g/L established in Green Seal Standard GC-03, Anti-Corrosive Paints.

Indoor Environmental Quality Credit 4.2

Low-Emitting Materials: Paints and Coatings

Requirements: (cont'd.)

Paints and coatings used on the building interior (defined as inside of the weatherproofing system and applied on-site) shall comply with the following:

• Clear wood finishes, floor coatings, stains, and shellacs applied to interior elements: Do not exceed the VOC content limits established in South Coast Air Quality Management District (SCAQMD).

Indoor Environmental Quality Credit 4.3

Low-Emitting Materials: Carpet Systems

Intent:

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Indoor Environmental Quality Credit 4.3

Low-Emitting Materials: Carpet Systems

Requirements:

All carpet installed in the building interior shall meet the testing and product requirements of the Carpet and Rug Institute's (CRI) Green Label Plus program.

All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute Green Label program.

All carpet adhesive shall meet the requirements of EQ Credit 4.1: VOC limit of 50 g/L.

Indoor Environmental Quality Credit 5

Indoor Chemical & Pollutant Source Control

Intent:

Minimize exposure of building occupants to potentially hazardous particulates and chemical pollutants.

Indoor Environmental Quality Credit 5

Indoor Chemical & Pollutant Source Control

Requirements:

Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas:

• Employ permanent entryway systems at least six feet long in the primary direction of travel to capture dirt and particulates from entering the building.

• Where hazardous gases or chemicals may be present or used, exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed.

AND

Indoor Environmental Quality Credit 5

Indoor Chemical & Pollutant Source Control

Requirements:

• In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better.

Indoor Environmental Quality Credit 6.1

Controllability of Systems: Lighting

Intent:

Provide a high level of lighting system control by individual occupants or by specific groups in multi-occupant spaces (i.e. classrooms or conference areas) to promote the productivity, comfort and well-being of building occupants.

SWBR Architects

Indoor Environmental Quality Credit 6.1

Controllability of Systems: Lighting

Requirements:

Provide **individual lighting controls for 90% (minimum) of the building occupants** to enable adjustments to suit individual **task** needs and preferences.

AND

Provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.

SWBR Architects

Indoor Environmental Quality Credit 7.1

Thermal Comfort: Design

Intent:

Provide a comfortable thermal environment that supports the productivity and well-being of building occupants.

Indoor Environmental Quality Credit 7.1

Thermal Comfort: Design

Requirements:

Design HVAC systems and the building envelope to meet the requirements of **ASHRAE Standard 55-2004**, Thermal Comfort Conditions for Human Occupancy. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.

Indoor Environmental Quality Credit 7.2

Thermal Comfort: Verification

Intent:

Provide for the assessment of building thermal comfort over time.

Indoor Environmental Quality Credit 7.2

Thermal Comfort: Verification

Requirements:

Agree to implement a thermal comfort survey of building occupants within a period of **6 to 18 months after occupancy**. This survey should collect **anonymous responses** about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort-related problems.

Agree to **develop a plan for corrective action if** the survey results indicate that **more than 20% of occupants are dissatisfied** with thermal comfort in the building. This plan should include measurement of relevant environmental variables in problem areas in accordance with **ASHRAE Standard 55-2004**.

Indoor Environmental Quality Credit 8.2

Daylight & Views: Views for 90% of Spaces

Intent:

Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

Indoor Environmental Quality Credit 8.2

Daylight & Views: Views for 90% of Spaces

Requirements:

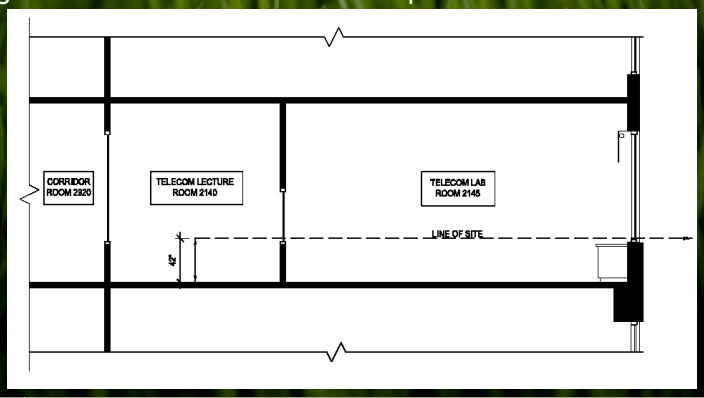
Achieve **direct line of sight to the outdoor environment** via vision glazing between 2'6" and 7'6" A.F.F. for building occupants in 90% of all regularly occupied areas. Determine the area with direct line of sight by totaling the regularly occupied square footage that meets the following criteria:

• In **plan view**, the area is within sight lines drawn from perimeter vision glazing.

• In **section view**, a direct sight line can be drawn from the area to perimeter vision glazing. Line of sight may be drawn through interior glazing. For private offices, the total SF can be counted if 75% or more of the area has direct line of sight to perimeter vision glazing. For multi-occupant spaces, the actual SF with direct line of sight to perimeter vision glazing is counted.

Indoor Environmental Quality Credit 8.2

Daylight & Views: Views for 90% of Spaces



ID Credit 1.1–1.4
Innovation in Design

Intent

To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the LEED for New Construction Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED for New Construction Green Building Rating System.

ID Credit 1.1–1.4
Innovation in Design

Requirements

Credit 1.1 (1 point) In writing, identify the intent of the proposed innovation credit, the proposed requirement for compliance, the proposed submittals to demonstrate compliance, and the design approach (strategies) that might be used to meet the requirements.

ID Credit 1.1–1.4
Innovation in Design

As a general rule of thumb, ID credits for *exceptional* performance are awarded for doubling the credit requirements and/or achieving the next incremental percentage threshold. For instance, an ID credit for exemplary performance in water use reduction (WE Credit 3) would require a minimum of 40% savings (20%=WE Credit 3.1; 30%=WE Credit 3.2, etc.).

ID Credit 1.1–1.4
Innovation in Design

ID credits for *innovative* performance are awarded for comprehensive strategies which demonstrate quantifiable environmental benefits. A representative list of innovative performance ID credits awarded to LEED certified projects is outlined below.

- Educational Outreach Program (IDc1.1 inquiry 9-24-01)
- Green Housekeeping (IDc1.1 inquiry 4-8-04)
- High Volume Fly Ash (IDc1.1 inquiry 12-6-02)
- Low-Emitting Furniture & Furnishings (AD inquiry 1-6-03; IDc1.1inquiry 10-21-03)
- Organic Landscaping / Integrated Pest Management Program (via certification submittal)

ID Credit 1.1–1.4
Innovation in Design

LEED ID Credits are evaluated for each project. It is important to note that the award of an ID Credit for one project at a specific point in time does not constitute automatic approval for a similar strategy in a future project.

Innovation credits are not awarded for the use of a particular product or design strategy if the technology aids in the achievement of an existing LEED credit.

ID Credit 2
LEED Accredited Professional

Intent

To support and encourage the design integration required by a LEED for New Construction green building project and to streamline the application and certification process.

ID Credit 2
LEED Accredited Professional

Requirements

At least one principal participant of the project team shall be a LEED Accredited Professional (AP).