# **UTILITY ALLOWANCE STUDY**

# **Renaissance Preserve Senior**

## **Prepared For:**

Renaissance Preserve 4221 Othello Lane Ft. Myers, FL 33916

Prepared By:

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# 1 Basis for Utility Allowance Using Consumptive Model

Under 26 CFR 1.42-10(b)(4) owners generally used the applicable Public Housing Authority (PHA) utility allowance established for the Section 8 Program or used a local utility company estimate. An alternative method, under the amended utility allowance regulations at 26 CFR 1.42(b)(4)(ii)(E), the utility allowance estimates may be calculated using an energy consumption analysis model. The Energy Consumption Model must, at a minimum, take into account specific factors including, but not limited to, unit size, building orientation, design, and materials, mechanical systems, appliances and characteristics of the building location..

Such allowances are estimates of the expenses associated with different types of utilities and different utility uses. The utilities for which allowances may be provided include electricity, natural gas, propane, fuel oil, wood or coal, and water and sewage service, as well as trash and garbage collection. The functions, or end-uses, covered by an allowance may include space heating, water heating, cooking, refrigeration, lighting, and appliances. Note that allowances are not provided for telephone or television cable service.

Whether a household receives an allowance for a given utility service generally depends on the way the utilities are metered. Utilities can be metered in one of three ways: master-meter, check-metered, and individually metered. Allowances are provided for check-metered and individually metered utilities, but not master-metered utilities. An allowance may also be provided to residents for some non-metered utilities, because the residents pay for these services directly. Trash services are an example of a utility that is non-metered in some areas.

### 2 Introduction

The Housing Authority of the City of Fort Myers maintains and operates 120 one and two bedroom residential units at the Renaissance Preserve Phase I development. The construction on the entire development was completed in 2007.

The study was performed with the assistance of the Utility Allowance Guidebook published in September 1998 and eQuest modeling software produced and developed by the US Department of Energy. This study uses the engineering-based methodology, that can be used to establish utility allowances. This method is based on engineering calculations and other technical information that is used to estimate the amount of energy or water a household should reasonable require.

The tenants are responsible for individual-metered electric, water and sewer utilities. The units in these developments are very similar to one another, with the basic difference being the number of bedrooms. Therefore, this study recommends utility allowances for only those utilities based on the number of bedrooms for an individual unit.

Trash collection is not paid directly by the tenants. No utility allowances are provided for these services.

# 3 Utility Allowance Recommendations

The following Utility Allowance recommendations are for residences of Renaissance Preserve

### Renaissance Preserve Phase I

Monthly Utility Allowance	1 BR	2 BR		
Electric	\$64	\$93		
Water	\$18	\$23		
Sewer	\$35	\$48		
Total	\$117	\$164		
Previous				
Change	\$117	\$164		

## **4 Utilities Cost**

## 4.1 Electricity

### **Monthly Electricity Cost**

Monthly Electricity Cost	1 BR	2 BR		
Customer Charge	\$11.33	\$11.33		
Energy Charge	\$52.36	\$81.65		
Total Electric	\$63.69	\$92.98		

### 4.1.1 Electric Rates

FPL serve Renaissance Preserve Phase I. FPL rates can be found on their website www.FPL.com. FPL's rates are as follows:

Customer Charge: \$11.33

Energy Charge (First 1,000kWh) = \$0.14390 Energy Charge (All additional kWh) = \$0.16661

## 4.1.2 Monthly Energy Charge

### **Monthly Consumption**

Total Consumption	1 BR	2 BR		
Electric (kWh)	364	567		
Energy Charge <1,000(\$/kWh)	\$52.36	\$81.65		
Energy Charge >1,000(\$/kWh)	\$0.00	\$0.00		
Energy Cost	\$52.36	\$81.65		

## 4.2 Water

#### **Monthly Water Cost**

Monthly Water Cost	1 BR	2 BR
Customer Charge	\$10.16	\$10.16
Water Charge	\$7.49	\$12.48
Total Water	\$17.65	\$22.64

#### 4.2.1 Water Rates

Water utility rates are based on Ft. Myers Utilities rates. The Ft. Myers Utilities can be found at www.cityftmyers.com.

Customer Charge (\$/mo):

\$10.16

Water Charge (0 to 5,000 gal, \$/1000gal):

\$5.48

## 4.2.2 Monthly Water Charge

Water	1 BR	2 BR
Water Consumption (gal)	1,367	2,278
Water Charge	\$7.49	\$12.48
Total Water Charge	\$7.49	\$12.48

### 4.2 Sewer

#### **Monthly Sewer Cost**

Monthly Sewer Cost	1 BR	2 BR		
Customer Charge	\$15.96	\$15.96		
Sewer Charge	\$19.39	\$32.32		
Total Sewer	\$35.35	\$48.28		

### 4.2.1 Sewer Rates

Sewer utility rates are based on Ft. Myers Utilities rates. The Ft. Myers Utilities can be found at www.cityftmyers.com.

Customer Charge (\$/mo):

\$15.96

Sewer Charge (\$/1000gal):

\$14.19

# 4.2.2 Monthly Sewer Charge

Water	1 BR	2 BR
Water Consumption (gal)	1,367	2,278
Sewer Charge	\$19.39	\$32.32
Total Sewer Charge	\$19.39	\$32.32

# 5.0 Consumption Studies

## Water Consumption

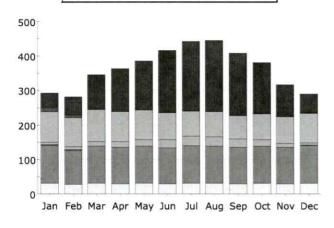
The following water consumption data is based on the 1999 study of Residential End Uses of Water published by the American Water Works Association.

Daily Water Consumption (gallons)	1 BR	2 BR
Average Number of Occupants	1.5	2.5
Shower	13.2	22
Faucets	16.4	27.3
Toilets	16.0	26.7
Total	45.6	75.9

## Monthly Water Consumption

Monthly Water Consumption	1 BR	2 BR
Water (Gal)	1,367	2,278

#### **Electric Consumption (kWh)**



Area Lighting Task Lighting Misc. Equipment

Exterior Usage Pumps & Aux. Ventilation Fans Water Heating Ht Pump Supp. Space Heating

Refrigeration Heat Rejection Space Cooling

#### Electric Consumption (kWh)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	42.8	52.2	101.2	124.8	143.5	181.5	203.4	208.8	181.5	148.3	93.5	55.3	1,536.9
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	2	-
Refrigeration	-	-	1,-1		-		-	-	*	-		-	-
Space Heat	10.6	8.5	-	-	-	-	-	. 4	-	-	0.2	0.9	20.2
HP Supp.	0.7	0.3	-			-	-		-	-	-		0.9
Hot Water	89.3	83.8	92.8	86.8	84.5	76.3	72.8	71.3	68.6	73.7	76.5	85.3	961.5
Vent. Fans	6.4	7.6	13.4	16.6	19.1	24.2	27.2	28.0	24.2	19.5	12.0	7.0	205.1
Pumps & Aux.	3.1	3.0	i. <del></del>		-	-	:=	-	-		0.4	1.6	8.1
Ext. Usage	_		-	- 2	20	-	-	-	=			2	-
Misc. Equip.	108.8	98.1	108.2	105.1	108.4	104.8	108.8	108.2	105.1	108.6	105.1	108.8	1,278.0
Task Lights	-	-		_	-	-	-	-	-	-	-	-	-
Area Lights	30.4	27.3	29.9	29.3	30.1	29.0	30.4	29.9	29.4	30.2	29.4	30.4	355.7
Total	292.1	280.7	345.5	362.7	385.5	415.8	442.7	446.1	408.7	380.3	317.1	289.2	4,366.5

#### Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	lun	Test	Aug	Sen	Oct	Nov	Dec	Total
Space Cool					ricy	<b>Ju</b>	541	nug	оср	000		DCC	Total
Heat Reject													

Refrigeration

Space Heat

HP Supp.

Hot Water

Vent. Fans

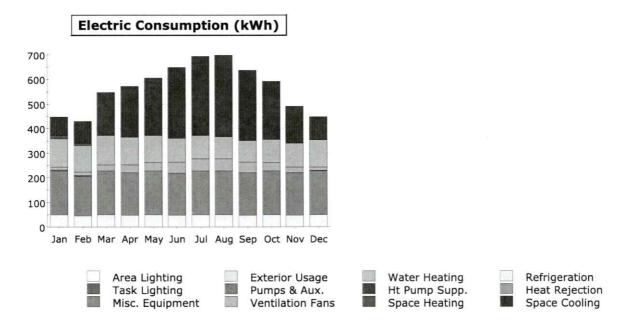
Pumps & Aux.

Ext. Usage

Misc. Equip.

Task Lights Area Lights

Total



#### Electric Consumption (kWh)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	75.7	91.6	175.1	208.6	235.3	288.2	321.9	330.5	284.6	234.8	150.6	94.1	2,491.0
Heat Reject.	-	-	-	-	-	-		<del>-</del>	-	-	-	-	-
Refrigeration	-		-	-	-	5 <del>4</del> 5	( <del>=</del>	_	(=);	-	1-	-	3=0
Space Heat	12.7	8.6	-	-	-	-	100	-	-	.=	0.3	0.8	22.3
HP Supp.	0.9	0.3	-		~	-	-	≅	-	-	-	_	1.2
Hot Water	114.4	107.6	119.7	112.1	109.0	98.7	94.1	92.1	88.4	94.7	98.1	109.3	1,238.2
Vent. Fans	11.9	14.0	25.7	30.9	34.9	43.0	48.1	49.4	42.3	34.4	21.5	13.1	369.0
Pumps & Aux.	3.2	3.1	-		-	-	-		-	-	0.4	1.6	8.2
Ext. Usage	-	-	-	=	-	-	-	-	-		=	-	-
Misc. Equip.	178.4	160.8	177.5	172.4	177.8	171.9	178.4	177.5	172.5	178.1	172.5	178.4	2,096.1
Task Lights	*	-	-	=	-	-	-	*	4	-		=40	
Area Lights	49.9	44.8	49.0	48.1	49.3	47.5	49.9	49.0	48.1	49.6	48.1	49.9	583.4
Total	447.0	430.8	547.0	572.2	606.3	649.3	692.3	698.5	635.9	591.5	491.5	447.2	6,809.4

#### Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool													
Heat Reject.													
Refrigeration													
Space Heat													
HP Supp.													
Hot Water													
Vent. Fans													
Pumps & Aux.													
Ext. Usage													
Misc. Equip.													
Task Lights													
Area Lights													
Total													

## Certification of Completeness and Accuracy for Utility Allowance Estimate Per Energy Consumption Model

De	Tenant Paid Utilities			Provider		
Development Name	Renaissance Preserve Senior	Yes	•	Electric	FPL	
Development Address	4221 Othello Lane		•	Gas		
		Yes	•	Water	City of Fort Myers	
Key Number	Key Number 2010		•	Sewer	City of Fort Myers	
Date of Study 9/9/2023			•	Trash		
Effective Date			•	Other		

Unit Type		# of Units	Square Feet	Electric	Gas	Water	Sewer	Trash	Other	Total Per Month
1 bedroom	•	114	638	64		18	35			\$117
2 bedroom ,	-	6	1030	93		23	48			\$164
	•									\$0
	-									\$0
	•									\$0
	•									\$0
Total U	Jnits	120								

#### The undersigned hereby certifies as follows:

- 1. Only utility costs paid directly by the resident(s) and not by or through the owner are included in the utility allowance calculation;
- 2. Cable television, telephone and internet costs are excluded from utility allowance calculation;
- 3. This estimate is based on the most recent 12-month period;
- 4. In the case of new buildings with less than 12 months of consumption data, 12 months of data for units of similar size and construction in the properties geographic area was used;
- 5. Utility rates are based on local rates and utility supplier(s) for the above-named property and data is no older than 60 days at the time of this submission;
- 6. The owner and Engineer/Qualified Professional are not related, as defined in IRC Section 267(b) or 707(b);
- 7. The Energy Consumption Model, at a minimum, takes into account specific factors including, but not limited to, unit size, building orientation, design and materials, mechanical systems, appliances, characteristics of the building location.

#### The following supporting documentation is included:

1. A letter from the Engineer/Qualified Professional explaining their analysis and findings for each Building Identification Number (BIN). The letter must explain how the specific factors in item #7 above were addressed.

2. Copy of the 90-day notice to residents.

Engineer/Qualified Professional:		Owner:	~ ( ) ~	
Signapure & Kally 9/2	bate	Signature of Legal Signatory	Laus	10-2-200 Date
Printed Name	-	Marca Do Printed Name		
Enitity Name	_	Renaissance Enitity Name	L treserve	Senior
License # if applicable	-			
Florida Housing Finance Corporation:				
Signature - FHFC Compliance Department	Date			