**INTRODUCTION**

***Legislative Findings and Intent***

In 1995, the Florida Legislature enacted s. 627.0628, Florida Statutes (F.S.), creating the Florida Commission on Hurricane Loss Projection Methodology (Commission).[[1]](#footnote-1) The Legislature specifically determined that “reliable projections of hurricane losses are necessary to assure that rates for residential insurance are neither excessive nor inadequate,” and that in recent years computer modeling has made it possible to improve on the accuracy of hurricane loss projections. The Legislature found that “it is the public policy of this state to encourage the use of the most sophisticated actuarial methods to ensure that consumers are charged lawful rates for residential property insurance coverage.”[[2]](#footnote-2) The Legislature clearly supports and encourages the use of computer modeling as part of the ratemaking process.

In 2014, the Florida Legislature expanded the role of the Commission by passing CS/CS/CS/SB 542 creating s. 627.715, F.S., which allowed for authorized insurers in Florida to write flood insurance. Additionally, several existing statutes were amended including the statute creating the Commission, s. 627.0628, F.S., and the insurance rating law statutory section, s. 627.062, F.S., dealing with rate filings. The new legislation tasked the Commission with adopting “actuarial methods, principles, standards, models, or output ranges for personal lines residential flood loss no later than July 1, 2017.” The Commission started the process in 2014, and published Discussion Flood Standards as of December 1, 2015 which also provided for various types of feedback leading up to the July 1, 2017, statutory deadline for adopting flood standards. The Commission adopted principles, standards, and output ranges for personal lines residential flood loss in June 2017. Where appropriate, this *Hurricane Standards Report of Activities* refers to flood and attempts to incorporate the references to flood in the context of the Commission’s duties, but the report does not contain any specific flood standards nor does it specifically address the process of reviewing flood models. The flood standards and process of reviewing flood models is published in the *2017 Flood Standards Report of Activities.*  Flood models will be reviewed separately from hurricane models using their respective standards as adopted by the Commission. The adoption of flood standards and the acceptability process for flood models is accomplished in parallel with the Commission’s role regarding hurricane models.

Everything contained in this *Hurricane Standards Report of Activities* relates to hurricane standards and the review of hurricane models.

***The Role of the Commission***

Although the statutory section creating the Commission is in the Florida Insurance Code, the Commission is an independent body and is administratively housed in the State Board of Administration of Florida (SBA). The role of the Commission is limited to adopting findings relating to the accuracy or reliability of particular methods, principles, standards, models, or output ranges used to project hurricane losses, flood losses, and probable maximum loss calculations.

Section 627.0628(3)(c), F.S., states that “to the extent feasible,” the SBA must “employ actuarial methods, principles, standards, models, or output ranges found by the Commission to be accurate or reliable” in formulating reimbursement premiums for the Florida Hurricane Catastrophe Fund (FHCF). Under s. 627.0628(3)(d), F.S., individual insurers are required to use the Commission’s findings in order to support or justify a rate filing with the Office of Insurance Regulation (OIR) as follows, “an insurer shall employ and may not modify or adjust actuarial methods, principles, standards, models, or output ranges found by the commission to be accurate or reliable in determining hurricane loss factors and probable maximum loss levels for use in a rate filing under s. 627.026. An insurer may employ a model in a rate filing until 120 days after the expiration of the commission’s acceptance of that model and may not modify or adjust models found by the commission to be accurate or reliable in determining probable maximum loss levels. This paragraph does not prohibit an insurer from using a straight average of model results or output ranges for the purposes of a rate filing for personal lines residential flood insurance coverage under s. 627.062.”

The Legislature addressed the definition of and the protection of trade secrets used in designing and constructing a hurricane model in 2005 and again in 2010. In s. 627.0628(3)(g), F.S.,[[3]](#footnote-3) the Legislature found that it is a public necessity to protect trade secrets “used in designing and constructing a hurricane or flood loss model,” and therefore, allowed an exemption from the public records law requirements and the public meetings law requirements. The goal of this legislation was to enable the Commission to have access to all aspects of hurricane and flood models and to encourage private companies to submit such models for review without concern that trade secrets will be disclosed. The exemption applies to “a trade secret, as defined in s. 812.081, F.S., which is used in designing and constructing a hurricane loss model” being exempt pursuant to s. 627.0628(3)(g), F.S., from the requirements of the public records law s. 119.07(1), F.S., including s. 24(a), Article I of the State Constitution and the public meetings law s. 286.011, F.S., including s. 24(b), Article I of the State Constitution.

In 2010 the Legislature revised the scope of the public records exemption by providing that the definition of “trade secret” in the Uniform Trade Secrets Act would apply in place of the definition in s. 812.081, F.S.[[4]](#footnote-4) The effect of this change was to make the public records exemption for trade secrets consistent with other similar exemptions.

The 2010 legislation also required that any portion of a closed Commission meeting be recorded. No portion of the closed meeting may be off the record. The bill also created a public records exemption for the recordings of closed meetings.

In 2014 the Legislature expanded the definition of and the protection of trade secrets to include those used in designing and constructing a “flood loss model.”[[5]](#footnote-5)

***The Work of the Commission***

The Commission was created as a panel of experts to evaluate computer models and other recently developed or improved actuarial methodologies for projecting hurricane losses, flood losses, and probable maximum loss levels so as “to resolve conflicts among actuarial professionals” and “to provide both immediate and continuing improvement in the sophistication of actuarial methods used to set rates.”[[6]](#footnote-6)

Sections 627.0628(3)(a) and (b), F.S., define the role of the Commission:

The commission shall consider any actuarial methods, principles, standards, models, or output ranges that have the potential for improving the accuracy of or reliability of the hurricane loss projections used in residential property insurance rate filings and flood loss projections used in rate filings for personal lines residential flood insurance coverage. The commission shall, from time to time, adopt findings as to the accuracy or reliability of particular methods, principles, standards, models, or output ranges.

The commission shall consider any actuarial methods, principles, standards, or models that have the potential for improving the accuracy of or reliability of projecting probable maximum loss levels. The commission shall adopt findings as to the accuracy or reliability of particular methods, principles, standards, or models related to probable maximum loss calculations.

The statutory language is clear in that those methods or models that have the potential for improving the accuracy or reliability of hurricane loss projections, flood loss projections, and probable maximum loss levels are the ones to be considered by the Commission. “Improving” suggests that the methods or models should be an improvement over the then existing current methods or models used in the residential rate filing process prior to the Commission’s enactment.

Section 627.0628(3)(e), F.S., originally established two deadlines for the Commission to take action. No later than December 31, 1995, the Commission was required to “adopt initial actuarial methods, principles, standards, models, or output ranges.” No later than July 1, 1996, the Commission was required to “adopt revised actuarial methods, principles, standards, models, or output ranges which include specification of acceptable computer models or output ranges derived from computer models.” The Commission met both those deadlines. To achieve the requirements of the Florida Statutes, in 1995 the Commission developed the following three-step evaluation process:

1. Identification of methods or models –models were identified in the following ways: (1) by referral after having been rejected by the Department of Insurance (now OIR); (2) by being submitted directly to the Commission; or (3) by the Commission’s soliciting them directly from the sponsor or owner.
2. Analysis of the method or model –the Commission adopted standards and five modules to assist in its analysis. The modules were as follows:

Module 1 – Description of the Model

Module 2 – Background and Professional Credentials of the Modeling Organization

Module 3 – Tests of the Model

Module 4 – Professional Team On-Site Review

Module 5 – Modeling Organization Presentation

1. Adoption of findings –the Commission may (1) accept a method or model, model specifications, or output ranges derived from computer models; or (2) accept the method or model, model specifications, or output ranges subject to modification; or (3) reject the method or model, model specifications, or output ranges.

In an effort to streamline the model submission and eliminate redundancies, the Commission conducted a complete and thorough reorganization of the *Hurricane Standards Report of Activities* in 2003. Part of the reorganization included renaming and incorporating the questions and forms in Modules 1–3 to sub-sections of the standards called disclosures and forms. Module 4 was moved to a separate section called On-Site Review, and Module 5 was moved to the acceptability process. The standards were realigned to facilitate the Commission voting process.

As originally required in s. 627.0628(3)(e), F.S., the Commission adopted revisions to actuarial methods, principles, standards, models, or output ranges on an annual basis. The Commission initially adopted standards for the specifications of a computer model on June 3, 1996. Those original standards have subsequently been revised and then adopted on the following dates:

 May 29, 1997 August 17 & 18, 2006

 April 24 & May 21, 1998 September 20 & 21, 2007

 August 17, 1999 September 17 & 18, 2008

 September 14 & 15, 2000 September 15 & 16, 2009

 September 19 & October 15, 2001 October 19, 20 & November 16, 2011

 September 18 & 19, 2002 September 24 & 25, 2013

 August 21 & 22, 2003 October 13 & 14, 2015

October 6 & 7, 2004 October 25 & 26, 2017.

 September 14 & 15, 2005

The Commission has operated on a biennial cycle since 2009. In 2009 the Legislature amended s. 627.0628(3)(e), F.S., to require the Commission to adopt revisions to actuarial methods, principles, standards, models, or output ranges every odd-numbered year. Under the prior law, these were adopted annually.[[7]](#footnote-7) The standards in this *Hurricane Standards Report of Activities* were revised and adopted on October 25 & 26, 2017. The Commission will again adopt revisions to the standards in 2019.

Also in 2009, the Legislature added subsection (4) to s. 627.0628, F.S., requiring the Commission to “hold public meetings for the purpose of receiving testimony and data regarding the implementation of windstorm mitigation discounts, credits, other rate differentials, and appropriate reductions in deductibles pursuant to s. 627.0629.”[[8]](#footnote-8) The legislation further required the Commission to present a report to the Governor, the Cabinet, the President of the Senate, and the Speaker of the House of Representatives by February 1, 2010, on its recommendations for “improving the process of assessing, determining, and applying windstorm mitigation discounts, credits, other rate differentials, and appropriate reductions in deductibles pursuant to s. 627.0629.”

The Commission held six public meetings for the purpose of receiving testimony and data regarding the implementation of windstorm mitigation discounts. The input and data received during the process, as well as other information gathered by the Commission, resulted in the Windstorm Mitigation Discounts Report. The report includes the Commission’s findings and recommendations designed to improve the mitigation discount process.

In 2014, the Legislature revised s. 627.0628(3)(e), F.S., establishing a new deadline for the Commission to take action. No later than July 1, 2017, “the Commission shall adopt actuarial methods, principles, standards, models, or output ranges for personal lines residential flood loss.” To achieve the requirements of the new Florida Statutes mandate, the Commission, in 2014, created a Flood Standards Development Committee. The committee met monthly to develop a set of “discussion flood standards” which were published December 1, 2015. After receiving input during on-site modeling organization feedback visits and further refinement through committee meetings, the Commission adopted flood standards in June 2017. The flood standards and procedures adopted on June 15 & 16, 2017 and October 25 & 26, 2017 are published in the *2017 Flood Standards Report of Activities.*

***The Mission Statement***

At the September 21, 1995, Commission meeting, the following mission statement was adopted:

The mission of the Florida Commission on Hurricane Loss Projection Methodology is to assess the efficacy of various methodologies which have the potential for improving the accuracy of projecting insured Florida losses resulting from hurricanes and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings.

The mission statement closely tracks the statute and restates the critical aspects of the Commission’s work. Minor revisions to the mission statement were adopted on November 30, 1995, and can be found in the Principles section of this report.

The mission statement was revised on September 15, 2009, to reflect the Commission’s role in reviewing models for their ability for projecting probable maximum loss levels. Thus, the mission statement was modified, as follows:

The mission of the Florida Commission on Hurricane Loss Projection Methodology is to assess the effectiveness of various methodologies which have the potential for improving the accuracy of projecting insured Florida losses and probable maximum loss levels resulting from hurricanes and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings and probable maximum loss calculations.

The mission statement was revised again on October 13, 2015, to reflect the Commission’s role in reviewing models for their ability for projecting flood losses used in rate filings for personal lines residential flood insurance coverage. Thus, the mission statement was modified, as follows:

The mission of the Florida Commission on Hurricane Loss Projection Methodology is to assess the effectiveness of various methodologies which have the potential for improving the accuracy of projecting insured Florida losses and probable maximum loss levels resulting from hurricanes and floods and to adopt findings regarding the accuracy or reliability of these methodologies for use in residential rate filings (hurricane loss projections), personal lines residential rate filings (flood loss projections), and probable maximum loss calculations.

***Overview***

To date, the following models have been evaluated by the Commission against the standards for the applicable years listed below and were found acceptable.

**Modeling Organization Standards**

AIR Worldwide Corporation 1996, 1997, 1998, 1999, 2000,

 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2015

Applied Research Associates, Inc. 1999, 2000,

 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2015

E.W. Blanch Co. 1998, 1999, 2000

CoreLogic, Inc. 1997, 1998, 1999, 2000,

 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2015

Florida Public Hurricane Loss Model 2006, 2007, 2008, 2009, 2011, 2013, 2015

Risk Management Solutions, Inc. 1997, 1998, 1999, 2000,

 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2013, 2015

Tillinghast–Towers Perrin 1998

1. CS/HB 2619 (Ch. 95-276, Laws of Florida). [↑](#footnote-ref-1)
2. Section 627.0628(1)(a), F.S. [↑](#footnote-ref-2)
3. Created in 2005 by HB 1939 (Ch. 2005-264, Laws of Florida). [↑](#footnote-ref-3)
4. HB 7119 (Ch. 2010-90, Laws of Florida). The language in s. 812.081, F.S., defines trade secrets which relate to theft, robbery, and related crimes. Under s. 688.002(4), F.S., “trade secret” means information, including a formula, pattern, compilation, program, device, method, technique, or process that:

Derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use; and

Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. [↑](#footnote-ref-4)
5. SB 1262 (Ch. 2014-98, Laws of Florida). [↑](#footnote-ref-5)
6. Section 627.0628(1)(b), F.S. [↑](#footnote-ref-6)
7. CS/SB 1758 (Ch. 2009-81, Laws of Florida). [↑](#footnote-ref-7)
8. CS/CS/CS HB 1495 (Ch. 2009-87, Laws of Florida). [↑](#footnote-ref-8)